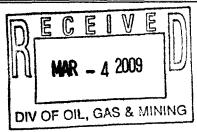
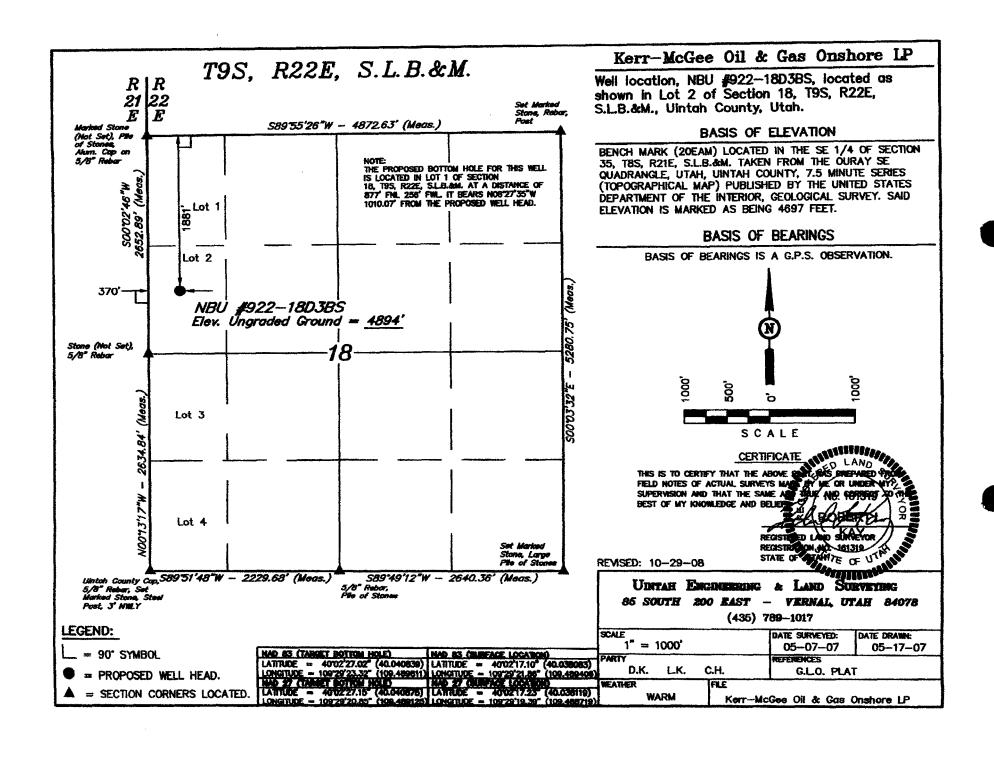
Form 3160-3 (August 2007) UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MAN APPLICATION FOR PERMIT TO D	NTERIOR AGEMENT	Γ	Ĺ	FORM APROMB NO. 1 Expires: July Lease Serial No. UTU0359 If Indian, Allottee or Tribe Ute Tribe	004-0137 y 31, 2010
la. Type of Work: X DRILL 1b. Type of Well: Oil Well X Gas Well Other	REENTER Singl	le Zone X Multiple Zor	8.	If Unit or CA Agreement, N 891008900A Lease Name and Well No. NBU 922-18D3BS API Well No.	Name and No.
Kerr-McGee Oil & Gas Ons Address PO Box 173779 Denver, CO 80217-3779 Location of well (Report location clearly and In accordance with a company of the company of	3b. Phone No	o. (include area code) (athy Schneebeck Dulnoan 720-929-6007 irements.*) NAD 27	10.	43-047-4059 2 Field and Pool, or Explorat Natural Buttes Field Sec.,T.,R.,M.,or Blk.ar	
At surface 1,881'FNL 370'FWL SW/4 NW/4 Lat. At proposed prod. zone ±877'FNL ±256'FWL		19 Long109.488		18 T 9S R 221	E Lot 2 S.L.B.&M.
14. Distance in miles and direction from the nearest town or post office Approximately 17 miles southeast of Ouray, Utah	3*		112.	County or Parish Uintah	Utah
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16.	No. of acres in lease	17. Spacing Unit	Unit dedicated to this well well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19.	Proposed Depth 10,089' MD		BIA Bond No. on file 3000291	
21. Elevations (Show whether DF, RT, GR, etc.) 4,894 ' Ungraded Ground Level	КВ 22	Aproximate date work will st March 30, 2009	art*	23. Estimated duration 10 days	
		24. Attachments			
 The following, completed in accordance with the requirements of Onsh Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office). 		4. Bond to cover the opitem 20 above).5. Operator certification	perations unle	n: ess covered by existing bond on and/ or plans as may be re	
25. Signature Lody Scheckel Dulrian	Name (Print	ted/ Typed) Kathy S	Schneebeck [Date Dulnoan	February 26, 2009
Title Staff Regulatory Analyst		E-mail:	kathy.	schneebeckdulnoan@ 720-929-6007	anadarko.com
Approved By Signature	Name (Print	ted/Typed)	ŧ	Date DU-	67-09
Title		ONMENTAL MANAGER	•		
Application approval does not warrant or certify that the applicant operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n. States any false, fictitious or fraudulent statements or representations as	nake it a crim	ne for any person knowingly			
* (Instructions on page 2)			\ P @	RIMER	7

Surf 628948X 44328684 40.038086 -109.488583 Federal Approval of this 6 28907 x Action is Necessary 443 31744 40.040840 -109.489010





NBU 922-18D3BS

Pad: NBU 922-18E

Surface: 1,881' FNL, 370' FWL (SW/4NW/4) Lot 2 BHL: ±877' FNL ±256' FWL (NW/4NW/4) Lot 1

> Sec. 18 T9S R22E Uintah, Utah Mineral Lease: UTU0359

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. - 2. Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	Resource
Uinta	0 – Surface	
Green River	1,828'	
Birds Nest	2,123'	Water
Mahogany	2,486'	Water
Wasatch	5,106'	Gas
Mesaverde	8,780'	Gas
MVU2	9,295'	Gas
MVL1	9,920'	Gas
TD (MD)	10,089'	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. **Proposed Casing & Cementing Program:**

Please see the Natural Buttes Unit SOP. See attached drilling diagram.

5. <u>Drilling Fluids Program</u>:

Please see the Natural Buttes Unit SOP.

6. Evaluation Program:

Please see the Natural Buttes Unit SOP.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 10,089' TD (MD), approximately equals 5,762 psi (calculated at 0.57 psi/foot).

Maximum anticipated surface pressure equals approximately 3,483 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Conclusion

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 922-18D3BS

Pad: NBU 922-18E
Surface: 1,881' FNL, 370' FWL (SW/4NW/4) Lot 2
BHL: ±877' FNL ±256' FWL (NW/4NW/4) Lot 1
Sec. 18 T9S R22E
Uintah, Utah
Mineral Lease: UTU0359

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

Approximately ±170' of new access road is proposed. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-

site.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

Please see the Natural Buttes Unit SOP.

Refer to Topo Map D for the location of the proposed pipelines.

Variances to Best Management Practices (BMPs) Requested:

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Shadow gray (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. Methods of Handling Waste Materials:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (Request is in lieu of filing Form 3160-5, after initial production).

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

Operator shall call the BIA for the seed mixture when the final reclamation occurs.

11. Surface/Mineral Ownership:

The well pad and access road are located on lands owned by:

Ute Indian Tribe P.O. Box 70 Fort Duchesne, Utah 84026 (435) 722-5141

The mineral ownership is listed below:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

12. Stipulations/Notices/Mitigation:

There are no stipulations or notices for this location.

13. Other Information:

A Class III archaeological survey has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

14. Lessee's or Operator's Representative & Certification:

Kathy Schneebeck Dulnoan Staff Regulatory Analyst Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6226 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

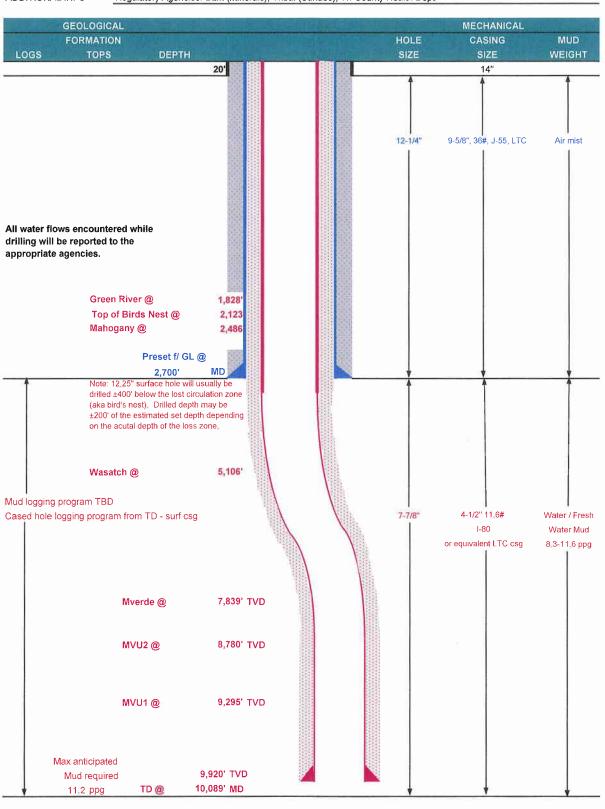
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

richy Schalleck Dulman	3/4/2009
Kathy Schneebeck Dulnoan	Date



KERR-MCGEE OIL & GAS ONSHORE LP

COMPANY NAME KERI	R-McGEE OIL	. & GAS ONSH	IORE LP			DATE	February	26, 2009	
WELL NAME NBU	J 922-18D	3BS				D	10,089'	TVD	9,344' MD
FIELD Natural Buttes		COUNTY	Uintah :	STATE	Utah		ELEVATION	4,894' GL	KB 4,909'
SURFACE LOCATION	SW/4 NW/4	1,881' FNL	370' FWL	Sec	18	T 9S	R 22E	Lot 2	
	Latitude:	40.038119	Longitude	e: -10	9.4894	406		NAD 27	
BTM HOLE LOCATION	NW/4 NW/4	±877' FNL	±256' FWL	Sec	18	T 9S	R 22E	Lot 1	
	Latitude:	40.040675	Longitude	e: -10	9,489	125		NAD 27	
OBJECTIVE ZONE(S)	Wasatch/Me	saverde							
ADDITIONAL INFO	Regulatory A	Agencies: BLM	(Minerals), Tri	bal (Sur	face),	Tri-Cou	unty Health De	pt.	





ERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

Ten Control								DESIGN FACTORS			
	SIZE	INT	ERVA		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION	
CONDUCTOR	14"		0-40'								
								3520	2020	453000	
SURFACE	9-5/8"	0	to	2,700	36.00	J-55	LTC	1.04	1.60	5.93	
								7,780	6,350	201,000	
PRODUCTION	4-1/2"	0	to	9,344	11.60	1-80	LTC	2.30	1.17	2.12	
1					IIIX III						

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

11.2 ppg) 0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact of water)

MASP

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD =

11.2 ppg)

0.57 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact, of water)

MABHP 5,762 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1	100	+ 0.25 pps flocele				
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
	LIE DI	+ 2% CaCl + 0.25 pps flocele	Contract to 1			
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to su	urface, optic	n 2 will be t	ıtilized	N III W
Option 2 LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
		+ 25 pps Flocele + 3% salt BWOW				
TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
	A CHARLE	+ 0.25 pps flocele			CV TIET	
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15,60	1.18
			AL BINE			
PRODUCTION LEAD	4,604'	Premium Lite II + 3% KCI + 0,25 pps	440	40%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	4,740'	50/50 Poz/G + 10% salt + 2% gel +,1% R-3	1160	40%	14.30	1.31

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 it, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe

PRODUCTION

Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,	000' minimum Intervals
-----------------------------	------------------------

Most rigs have PVT System	for mud monitoring. If no PVT is available, visual monitoring w	ill be utilized.
DRILLING ENGINEER:		DATE:
	John Huycke / Grant Schluender	
DRILLING SUPERINTENDENT:		DATE:
	John Merkel / Lovel Young	7/

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained



D	ril	lin	g	Se	rv	'ic	es
---	-----	-----	---	----	----	-----	----

Proposal



ANADARKO - KERR McGEE

NBU 922-18D3BS

UINTAH COUNTY, UTAH

WELL FILE: PLAN 2

OCTOBER 4, 2007

Weatherford International, Ltd.

15710 John F. Kennedy Blvd Houston, Texas 77032 USA +1.281.260.1300 Main +1.281.260.4730 Fax www.weatherford.com



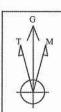


ANADARKO KERR MCGEE OIL & GAS NBU 922-18D3BS UINTAH COUNTY, UTAH

1500



Weatherford



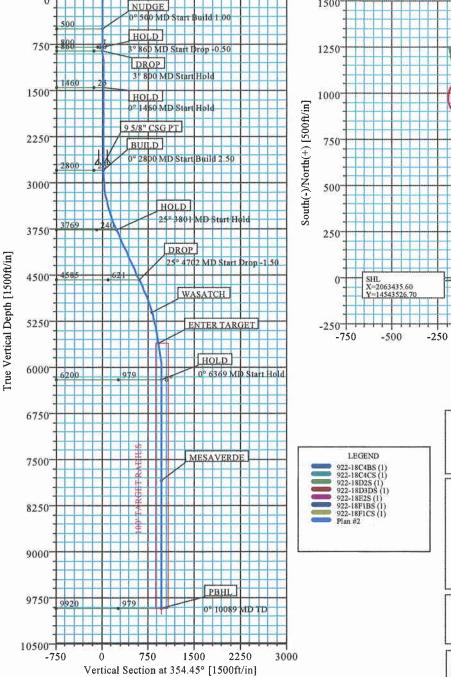
Azimuths to Grid North True North: -0.97° Magnetic North: 10.60°

Magnetic Field Strength: 52768nT Dip Angle: 66.02° Date: 9/25/2007 Model: bggm2006

				S	ECTION DE	TAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	335.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	500.00	0.00	335.00	500.00	0.00	0.00	0.00	335.00	0.00	
3	800.00	3.00	335.00	799.86	7.12	-3.32	1.00	-25.00	7.40	
4	860.00	3.00	335.00	859.78	9.96	-4.65	0.00	0.00	10.36	
5	1460.00	0.00	354.99	1459.51	24.20	-11.28	0.50	180.00	25.17	
6	2800.49	0.00	354.99	2800.00	24.20	-11.28	0.00	335.00	25.17	
7	3800.73	25.01	354.99	3768.79	238.20	-30.05	2.50	0.00	239.99	
8	4701.76	25.01	354.99	4585.36	617.62	-63.32	0.00	0.00	620.85	
9	6368.83	0.00	354.99	6200.00	974.30	-94.60	1.50	180.00	978.88	
10	10088.83	0.00	354.99	9920.00	974.30	-94.60	0.00	354.99	978.88	PBHL

KB = 4908'GR = 4893'

WELL DETAILS Name +N/-S +E/-W Northing Easting Latitude Longitude Slot 2063435.60 40°02'17.352N 109°29'19.398W N/A 922-18D3BS 0.00 0.00 14543526.70



PBHI. 1000 250 500 750 1250 West(-)/East(+) [500ft/in]

FORMATION TOP DETAILS

TVDPath MDPath Formation No. WASATCH MESAVERDE

FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Geodetic System: Universal Transverse Mercator (USfeet)
Ellipsoid: NAD27 (Clarke 1866)
Zone: UTM Zone 12, North 114W to 108W
Magnetic Model: bggm2006

System Datum: Mean Sea Level Local North: Grid North

CASING DETAILS No. TVD Size 9 5/8" CSG PT 2700.00 2700.49 9.62

Plan: Plan #2 (922-18D3BS/1)

Created By: R. JOYNER

Date: 10/4/2007

Veatherford Drilling Services DIRECTIONAL PLAN REPORT

Date:



Anadarko-Kerr-McGee Company: Field:

NBU 922-18D3BS PAD CDEF Site:

922-18D3BS Well:

Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference:

Time: 09:07:59 Site: NBU 922-18D3BS PAD CDEF

SITE 4908.0

Well (0.00N,0.00E,354.45Azi)

Minimum Curvature Db: Sybase

Plan: Plan #2 Date Composed:

Survey Calculation Method:

10/4/2007

Version:

10/4/2007

Principal: Yes Tied-to:

From Surface

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Map System:Universal Transverse Mercator (USfeet)

Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level

Map Zone: Coordinate System: UTM Zone 12, North 114W to 108W

Geomagnetic Model:

Site Centre bggm2006

Site:

NBU 922-18D3BS PAD CDEF

Site Position: Мар From:

1853' FNL 329' FWL SEC 18-T9S-R22E Northing: 14543526.70 ft 2063435.60 ft Easting:

Latitude: Longitude:

40 2 17.352 N 109 29 19.398 W

Position Uncertainty: Ground Level:

0.00 ft 4893.00 ft North Reference: Grid Convergence: Grid 0.97 deg

Well:

Wellpath: 1

Current Datum:

Vertical Section:

922-18D3BS

Slot Name:

Well Position: +N/-S +E/-W ft 00.0 Northing: 14543526.70 ft 0.00 ft 2063435.60 ft Easting:

Latitude: Longitude:

40 17.352 N 109 29 19.398 W

Position Uncertainty:

0.00 ft

Drilled From:

Surface

Tie-on Depth: Height 4908.00 ft **Above System Datum:**

0.00 ft Mean Sea Level

SITE Magnetic Data: 9/25/2007 52768 nT Field Strength:

+N/-SDepth From (TVD)

Declination: Mag Dip Angle: 11.57 deg 66.02 deg

+E/-W

Direction

ft ft ft deg 0.00 0.00 354.45 0.00

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100f	Build t deg/100f	Turn t deg/100ft	TFO deg	Target
0.00	0.00	335.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	335.00	500.00	0.00	0.00	0.00	0.00	0.00	335.00	
800.00	3.00	335.00	799.86	7.12	-3.32	1.00	1.00	0.00	-25.00	
860.00	3.00	335.00	859.78	9.96	-4.65	0.00	0.00	0.00	0.00	
1460.00	0.00	354.99	1459.51	24.20	-11.28	0.50	-0.50	0.00	180.00	
2800.49	0.00	354.99	2800.00	24.20	-11.28	0.00	0.00	0.00	335.00	
3800.73	25.01	354.99	3768.79	238.20	-30.05	2.50	2.50	0.00	0.00	
4701.76	25.01	354.99	4585.36	617.62	-63.32	0.00	0.00	0.00	0.00	
6368.83	0.00	354.99	6200.00	974.30	-94.60	1.50	-1.50	0.00	180.00	
10088.83	0.00	354.99	9920.00	974.30	-94.60	0.00	0.00	0.00	354.99	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
500.00	0.00	335.00	500.00	0.00	0.00	0.00	0.00	14543526.70	2063435.60	NUDGE
600.00	1.00	335.00	599.99	0.79	-0.37	0.82	1.00	14543527.49	2063435.23	
700.00	2.00	335.00	699.96	3.16	-1.48	3.29	1.00	14543529.86	2063434.12	
800.00	3.00	335.00	799.86	7.12	-3.32	7.40	1.00	14543533.82	2063432.28	HOLD
860.00	3.00	335.00	859.78	9.96	-4.65	10.36	0.00	14543536.66	2063430.95	DROP
900.00	2.80	335.00	899.73	11.80	-5.50	12.27	0.50	14543538.50	2063430.10	
1000.00	2.30	335.00	999.63	15.83	-7.38	16.47	0.50	14543542.53	2063428.22	
1100.00	1.80	335.00	1099.57	19.07	-8.89	19.84	0.50	14543545.77	2063426.71	
1200.00	1.30	335.00	1199.53	21.52	-10.04	22.39	0.50	14543548.22	2063425.56	
1300.00	0.80	335.00	1299.51	23.18	-10.81	24.12	0.50	14543549.88	2063424.79	
1400.00	0.30	335.00	1399.51	24.05	-11.22	25.02	0.50	14543550.75	2063424.38	
1460.00	0.00	354.99	1459.51	24.20	-11.28	25.17	0.50	14543550.90	2063424.32	HOLD

Weatherford Drilling Services **DIRECTIONAL PLAN REPORT**



Company: Anadarko-Kerr-McGee
Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)
Site: NBU 922-18D3BS PAD CDEF

Well: 922-18D3BS

Wellpath: 1

Date: 10/4/2007

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method:

Time: 09:07:59 Page: e: Site: NBU 922-18D3BS PAD CDEF SITE 4908.0

Well (0.00N,0.00E,354.45Azi)

Minimum Curvature Db: Sybase

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comm
										
1500.00	0.00	354.99	1499.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
1600.00	0.00	354.99	1599.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
1700.00	0.00	354.99	1699.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
1800.00	0.00	354.99	1799.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
1900.00	0.00	354.99	1899.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2000.00	0.00	354.99	1999.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2100.00	0.00	354.99	2099.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2200.00	0.00	354.99	2199.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2300.00	0.00	354.99	2299.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2400.00	0.00	354.99	2399.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2500.00	0.00	354.99	2499.51	24.20	-11,28	25.17	0.00	14543550.90	2063424.32	
2600.00	0.00	354.99	2599.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2700.00	0.00	354.99	2699.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	
2700.49	0.00	354.99	2700.00	24.20	-11,28	25.17	0.00	14543550.90	2063424.32	9 5/8" CSG P
2800.00	0.00	354.99	2799.51	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	0.000
2800.49	0.00	354.99	2800.00	24.20	-11.28	25.17	0.00	14543550.90	2063424.32	BUILD
2900.00	2.49	354.99	2899.48	26.35	-11.47	27.33	2.50	14543553.05	2063424.13	50,65
3000.00	4.99	354.99	2999.25	32.84	-12.04	33.85	2.50	14543559.54	2063423.56	
3100.00	7.49	354.99	3098.65	43.66	-12,99	44.71	2.50	14543570.36	2063422.61	
3200.00	9.99	354.99 354.99	3197.49	58.80	-12.99 -14.32	59.90	2.50	14543570.36	2063421.28	
			3197.49		-14.32 -16.02	79.39	2.50		2063421.26	
3300.00	12.49	354.99		78.21				14543604.91		
3400.00	14.99	354.99	3392.69	101.86	-18.09	103.13	2.50	14543628.56	2063417.51	
3500.00	17.49	354.99	3488.70	129.72	-20.54	131.09	2.50	14543656.42	2063415.06	
3600.00	19.99	354.99	3583.39	161.71	-23.34	163.21	2.50	14543688.41	2063412.26	
3700.00	22.49	354.99	3676.59	197.80	-26.51	199.43	2.50	14543724.50	2063409.09	
3800.00	24.99	354.99	3768.12	237.89	-30.02	239.68	2.50	14543764.59	2063405.58	
3800.73	25.01	354.99	3768.78	238.20	-30.05	239.99	2.50	14543764.90	2063405.55	HOLD
3900.00	25.01	354.99	3858.75	280.00	-33.72	281.95	0.00	14543806.70	2063401.88	
4000.00	25.01	354.99	3949.38	322.11	-37.41	324.22	0.00	14543848.81	2063398.19	
4100.00	25.01	354.99	4040.00	364.22	-41.10	366.49	0.00	14543890.92	2063394.50	
4200.00	25.01	354.99	4130.63	406.33	-44.79	408.76	0.00	14543933.03	2063390.81	
4300.00	25.01	354.99	4221.25	448.44	-48.49	451.03	0.00	14543975.14	2063387.11	
4400.00	25.01	354.99	4311.88	490.55	-52.18	493.30	0.00	14544017.25	2063383.42	
4500.00	25.01	354.99	4402.51	532.66	-55.87	535.57	0.00	14544059.36	2063379.73	
4600.00	25.01	354.99	4493.13	574.77	-59.56	577.84	0.00	14544101.47	2063376.04	
4700.00	25.01	354.99	4583.76	616.88	-63.26	620.11	0.00	14544143.58	2063372.34	
4700.00	25.01	354.99	4585.36	617.62	-63.32	620.85	0.00	14544144.32	2063372.28	DROP
4800.00	23.53	354.99	4674.91	657.85	-66.85	661.23	1.50	14544184.55	2063368.75	21.0.
4000.00	22.02	254.00	4767 44	696.42	70.22	699.95	1 50	14544223.12	2063365.37	
4900.00		354.99	4767.11		-70.23		1.50			
5000.00		354.99	4860.28	732.58	-73.40 76.36	736.24	1.50	14544259.28 14544292.99	2063362.20	
5100.00	19.03	354.99	4954.38	766.29	-76.36	770.08	1.50		2063359.24	
5200.00	17.53	354.99	5049.33	797.54	-79.10	801.45	1.50	14544324.24	2063356.50	MARATOLI
5259.29	16.64	354.99	5106.00	814.89	-80.62	818.87	1.50	14544341.59	2063354.98	WASATCH
5300.00	16.03	354.99	5145.07	826.30	-81.62	830.32	1.50	14544353.00	2063353.98	
5400.00	14.53		5241.53	852.56	-83.92	856.68	1.50	14544379.26	2063351.68	
5500.00	13.03	354.99	5338.65	876.29	-86.01	880.50	1.50	14544402.99	2063349.59	
5600.00	11.53		5436.35	897.48	-87.86	901.77	1.50	14544424.18	2063347.74	
5700.00	10.03	354.99	5534.59	916.12	-89.50	920.48	1.50	14544442.82	2063346.10	
5772.41	8.95		5606.00	928.01	-90.54	932.42	1.50	14544454.71	2063345.06	ENTER TAR
5800.00	8.53	354.99	5633.27	932.19	-90.91	936.61	1.50	14544458.89	2063344.69	
5900.00	7.03	354.99	5732.35	945.67	-92.09	950.15	1.50	14544472.37	2063343.51	
6000.00	5.53	354.99	5831.75	956.58	-93.05	961.09	1.50	14544483.28	2063342.55	
6100.00	4.03	354.99	5931.40	964.88	-93.77	969.43	1.50	14544491.58	2063341.83	

Weatherford Drilling Services **DIRECTIONAL PLAN REPORT**



Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-18D3BS PAD CDEF Field:

Site:

Well: 922-18D3BS

Wellpath: 1

Time: 09:07:59 Date: 10/4/2007

Page: Site: NBU 922-18D3BS PAD CDEF SITE 4908.0 Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method: Well (0.00N,0.00E,354.45Azi)

Minimum Curvature Db: Sybase

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comme
	ueg	uey				. IL	deg/100it	П		
6200.00	2.53	354.99	6031.23	970.58	-94.27	975.15	1.50	14544497.28	2063341.33	
6300.00	1.03	354.99	6131.18	973.68	-94.55	978.26	1.50	14544500.38	2063341.05	
6368.83	0.00	354.99	6200.00	974.30	-94.60	978.88	1.50	14544501.00	2063341.00	HOLD
6400.00	0.00	354.99	6231.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
6500.00	0.00	354.99	6331.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
6600.00	0.00	354.99	6431.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
6700.00	0.00	354.99	6531.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
6800.00	0.00	354.99	6631.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
6900.00	0.00	354.99	6731.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7000.00	0.00	354.99	6831.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7100.00	0.00	354.99	6931.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7200.00	0.00	354.99	7031.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7300.00	0.00	354.99	7131.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7400.00	0.00	354.99	7231.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7500.00	0.00	354.99	7331.17	974.30	-94.60	978.88	0.00	145 44 501.00	2063341.00	
7600.00	0.00	354.99	7431.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7700.00	0.00	354.99	7531.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7800.00	0.00	354.99	7631.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
7900.00	0.00	354.99	7731.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8000.00	0.00	354.99	7831.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8007.83	0.00	354.99	7839.00	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	MESAVERDE
8100.00	0.00	354.99	7931.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8200.00	0.00	354.99	8031.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8300.00	0.00	354.99	8131.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8400.00	0.00	354.99	8231.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8500.00	0.00	354.99	8331.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8600.00	0.00	354.99	8431.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8700.00	0.00	354.99	8531.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8800.00	0.00	354.99	8631.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
8900.00	0.00	354.99	8731.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9000.00	0.00	354.99	8831.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9100.00	0.00	354.99	8931.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9200.00	0.00	354.99	9031.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9300.00	0.00	354.99	9131.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9400.00	0.00	354.99	9231.17	974.30	-94.60	978.88	0.00	14544501,00	2063341.00	
9500.00	0.00	354.99	9331.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9600.00	0.00	354.99	9431.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9700.00	0.00	354.99	9531.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9800.00	0.00	354.99	9631.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
9900.00	0.00	354.99	9731.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
10000.00	0.00	354.99	9831.17	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	
10088.83	0.00	354.99	9920.00	974.30	-94.60	978.88	0.00	14544501.00	2063341.00	PBHL

Targets

Name	Description Dip. D	TVD ir. ft	+N/-S ft	+E/-W	Map Northing ft	Map Easting ft	< Latitude Deg Min Sec	> < Longitude> Deg Min Sec
PBHL		9920.00	974.30	-94.60	14544501.002	2063341.00	40 2 26.997 N	109 29 20.402 W
-Circle (R	adius: 100)							

-Plan hit target





Company: Anadarko-Kerr-McGee

Field:

Well: Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-18D3BS PAD CDEF 922-18D3BS

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Date: 10/4/2007

Co-ordinate(NE) Reference:

Time: 09:07:59

SITE 4908.0

Well (0.00N,0.00E,354.45Azi)

Minimum Curvature Db: Sybase

Casing Points

Site:

MD ft	TVD ft	Diameter in	Hole Size in	Name			
2700.49	2700.00	9.62	9.62	9 5/8" CSG PT	 		

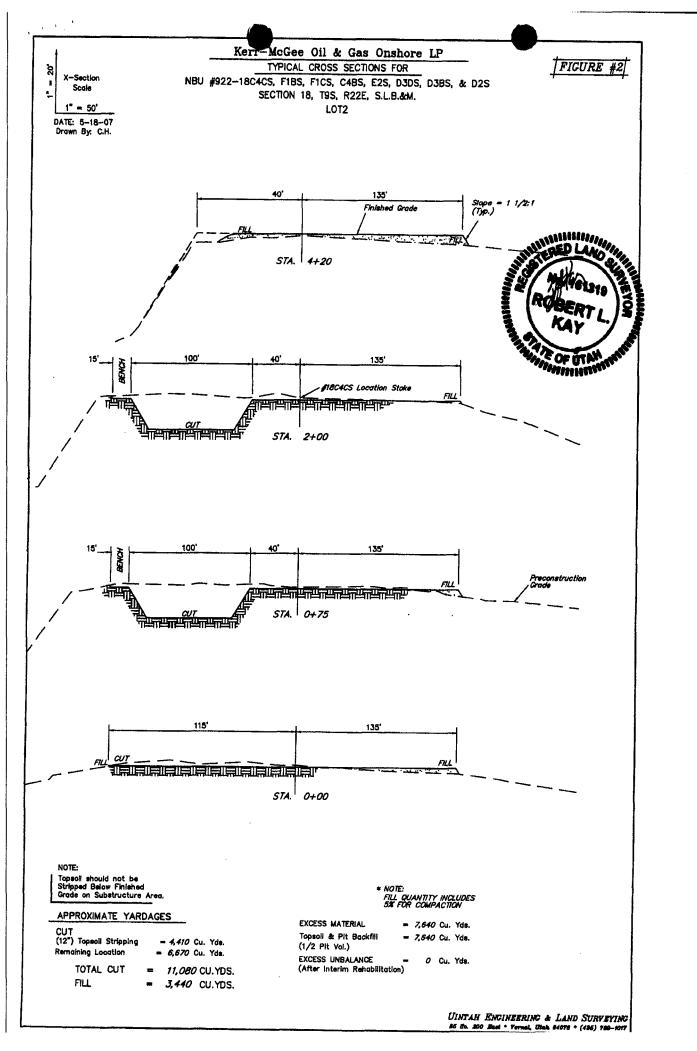
Annotation

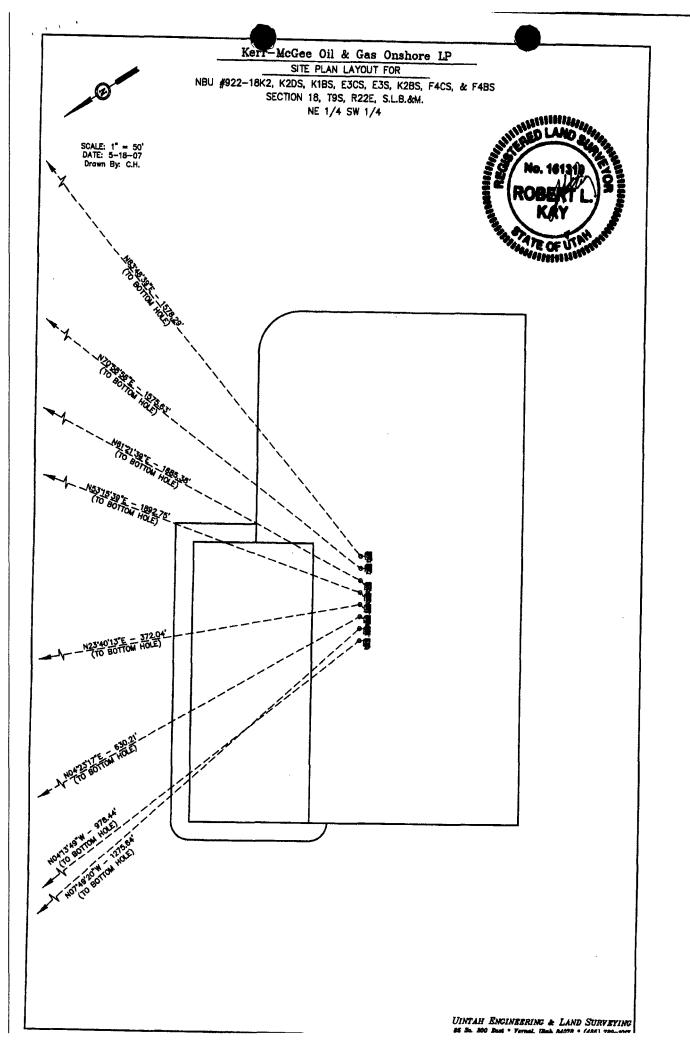
MD ft	TVD ft		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
500.00	500.00	NUDGE	
800.00	799.86	HOLD	
860.00	859.78	DROP	
1460.00	1459.51	HOLD	
2800.49	2800.00	BUILD	
3800.73	3768.78	HOLD	
5772.41	5606.00	ENTER TARGET	
4701.76	4585.35	DROP	
6368.83	6200.00	HOLD	
10088.83	9920.00	PBHL	

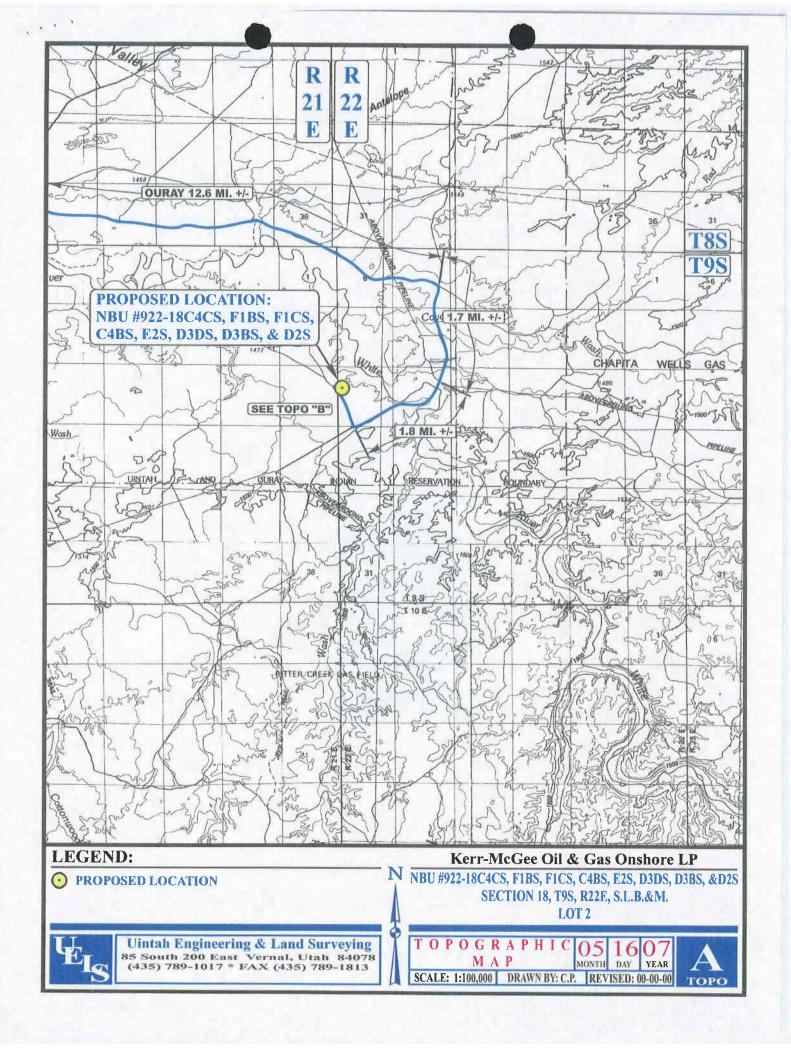
Formations

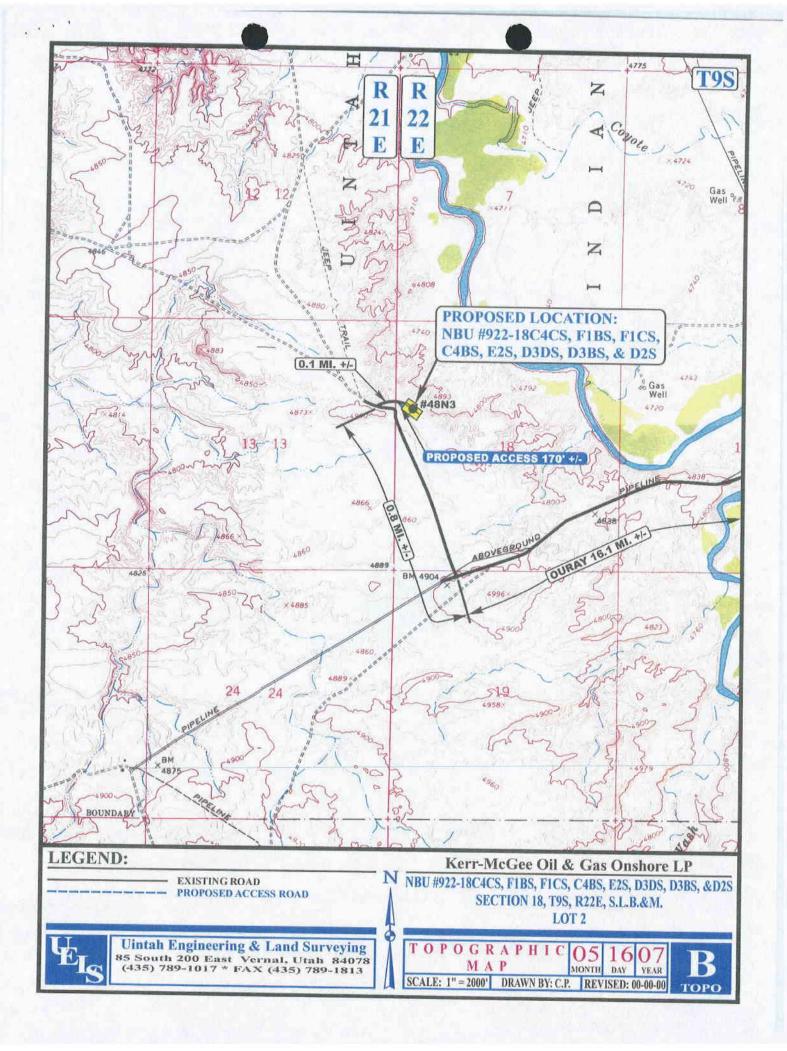
	MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5	259.29	5106.00	WASATCH		0.00	0.00
8	007.83	7839.00	MESAVERDE		0.00	0.00

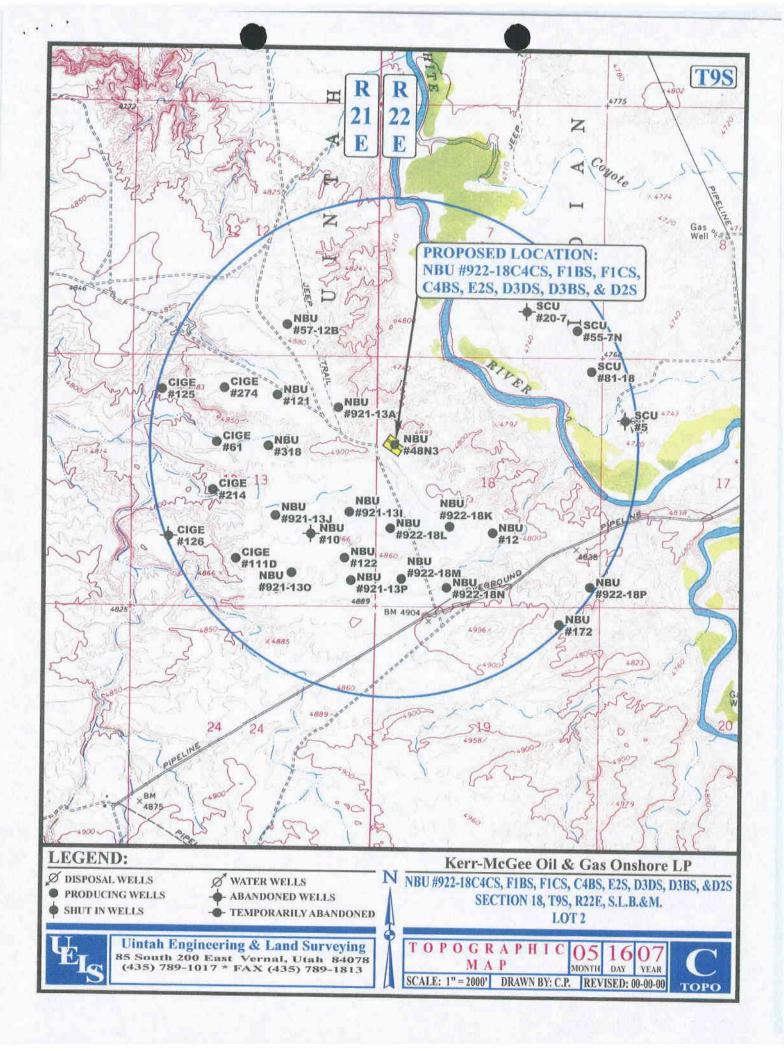
Kerr-McGee Oil & Gas Onshore LP SITE PLAN LAYOUT FOR NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S SECTION 18, T9S, R22E, S.L.B.&M. LOT2 SCALE: 1" = 50' DATE: 5-18-07 Drown By: C.H. 7 F-3.1' F-3.2' El. 89.9' <u>Sta</u>. 4<u>+20</u> 8 F-0.5 El. 92.6' Round Comers ि 52 C-0.8' 10 E. 93.9' 10 E C-0.6' El. 94.5' C—11.4' (bon. ph) RESERVE PITS (10' Doop) Sta. 2+00 1 F-0.7' 10/151 El. 92.4' ¥ Existing Dehy Existing Meter Existing Pipeline Existing A -1.7 3 E. 193.8 193.8% Sto. 0+00 EI. 94.1' A C-11.0' 2 F-1.7' E. 91.4' Approx. Top of Cut Slope NOTES: Elev. Ungraded Ground At #18040S Loc. Stake = 4893.7' FINISHED GRADE ELEV. AT #1804CS LOC. STAKE = 4893.1' UINTAH ENGINEERING & LAND SURVEYING 85 Sa. 200 Bast * Vernal, than 84078 * (485) 788-1017

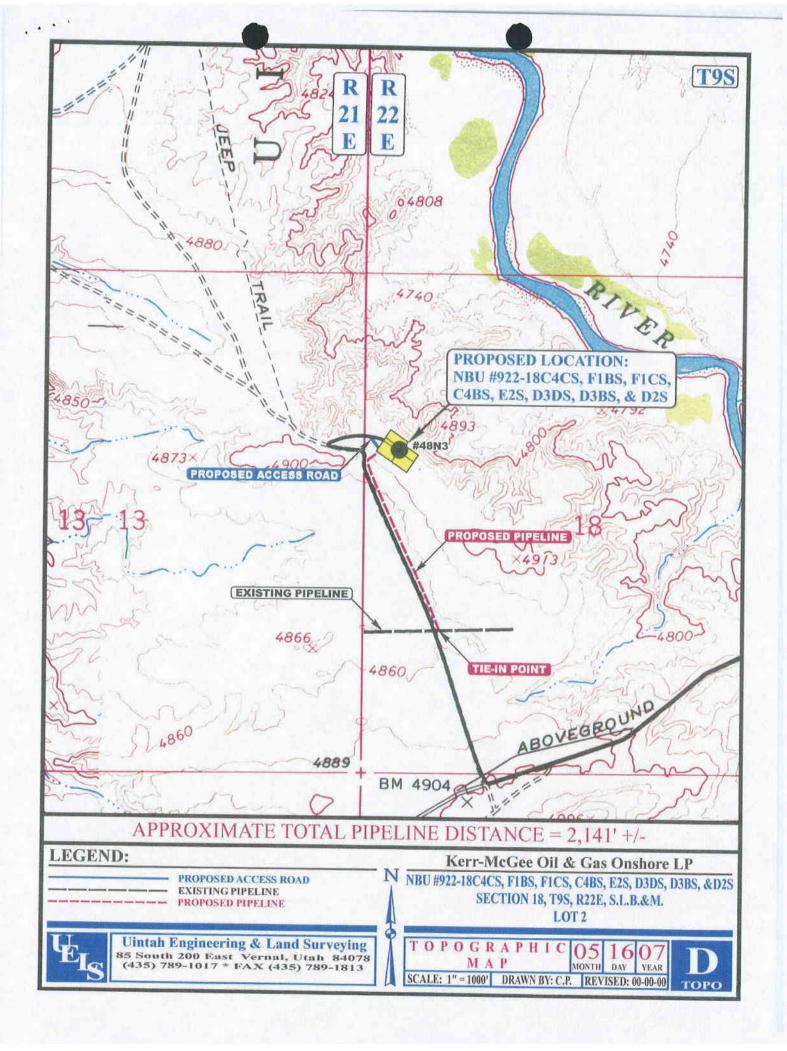












Kerr-McGee Oil & Gas Onshore LP

NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S

LOCATED IN UINTAH COUNTY, UTAH SECTION 18, T9S, R22E, S.L.B.&M.

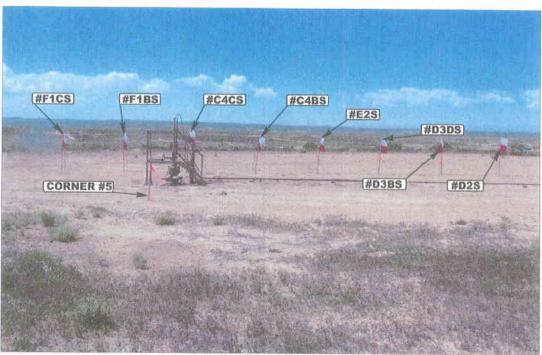


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

MONTH DAY YEAR

РНОТО

TAKEN BY: L.K. | DRAWN BY: C.P. | REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S

LOCATED IN UINTAH COUNTY, UTAH SECTION 18, T9S, R22E, S.L.B.&M.

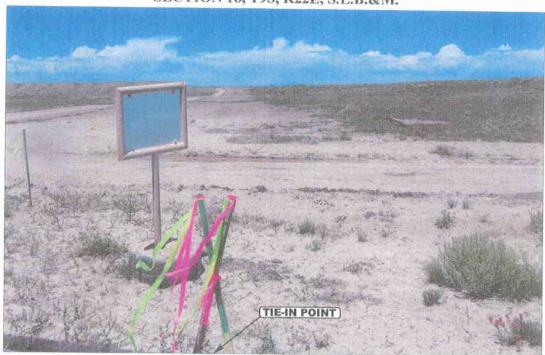


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: NORTHWESTERLY

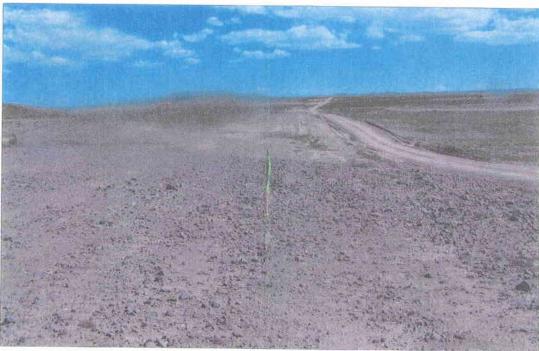


PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHWESTERLY



Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

PIPELINE PHOTOS

РНОТО

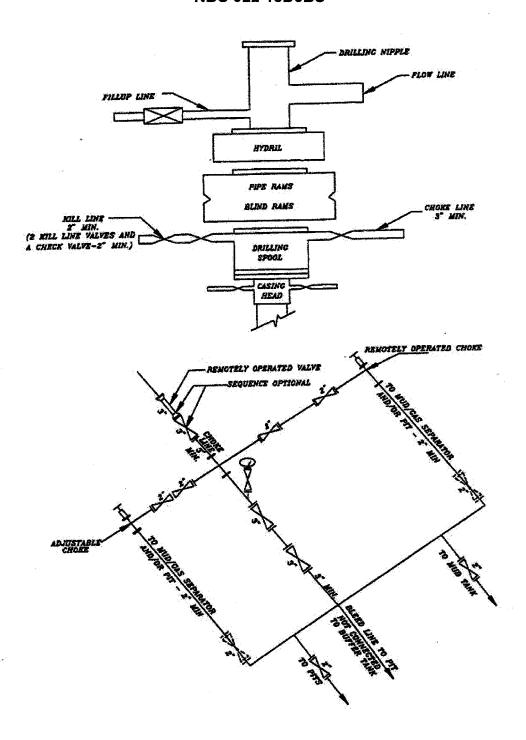
TAKEN BY: L.K. DRAWN BY: C.P. REVISED: 00-00-00

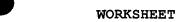
Kerr-McGee Oil & Gas Onshore LP NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S SECTION 18, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 170' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.0 MILES.

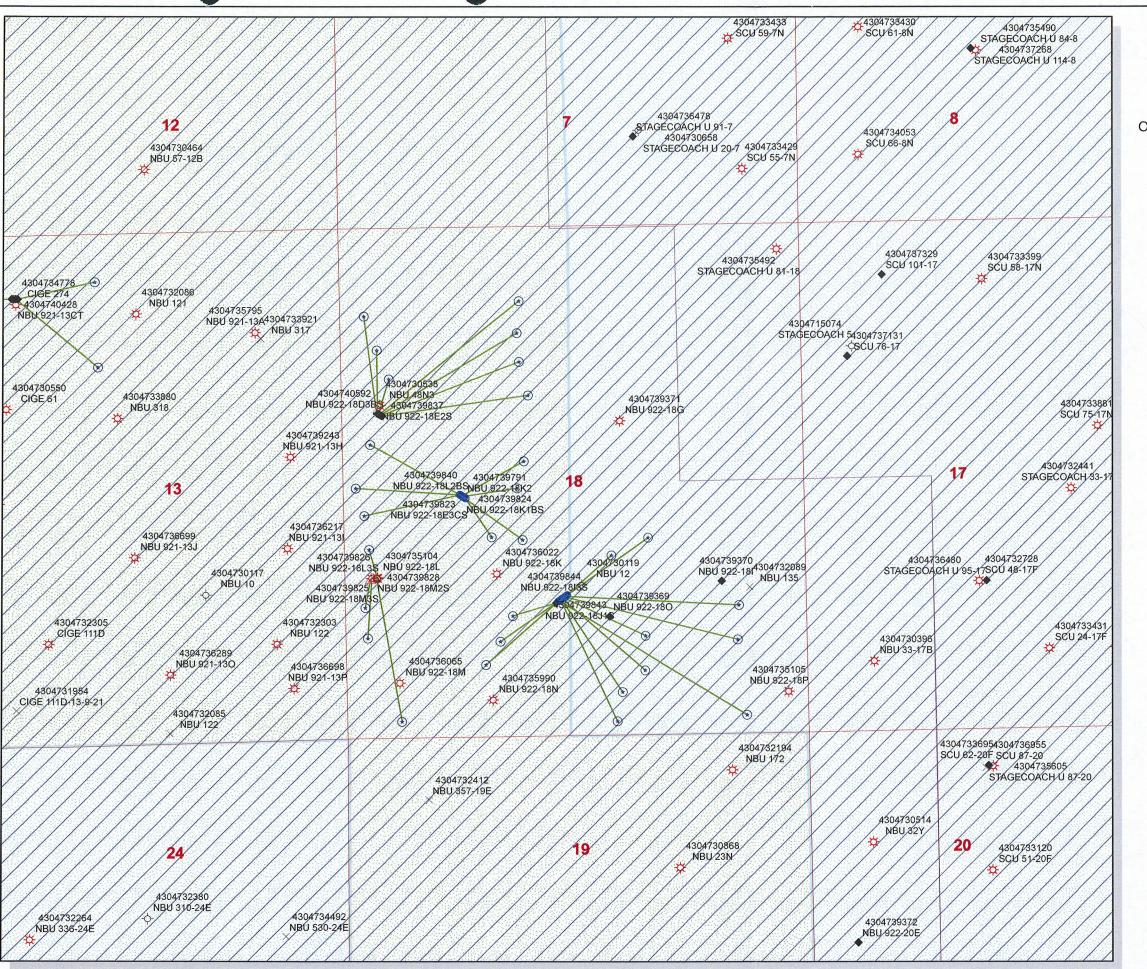
EXHIBIT A NBU 922-18D3BS





APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 03/04/2009	API NO. ASSIGNED: 43-047-40592
WELL NAME: NBU 922-18D3BS OPERATOR: KERR-MCGEE OIL & GAS (N2995) CONTACT: KATHY DULNOAN	PHONE NUMBER: 720-929-6007
PROPOSED LOCATION:	INSPECT LOCATN BY: / /
SWNW 18 090S 220E	Tech Review Initials Date
SURFACE: 1881 FNL 0370 FWL JNW BOTTOM: 0877 FNL 0256 FWL	Engineering
COUNTY: UINTAH	Geology
LATITUDE: 40.03809 LONGITUDE: -109.48858 UTM SURF EASTINGS: 628948 NORTHINGS: 44328	Surface
FIELD NAME: NATURAL BUTTES (630	
LEASE TYPE: 1 - Federal LEASE NUMBER: UTU0359 SURFACE OWNER: 2 - Indian	PROPOSED FORMATION: WSMVD COALBED METHANE WELL? NO
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. WYB000291) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) RDCC Review (Y/N) (Date:) MA Fee Surf Agreement (Y/N) IMA Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3. Unit: NATURAL BUTTES R649-3-2. General
COMMENTS: Sop Separate !	36
STIPULATIONS: 1- Section Opport	



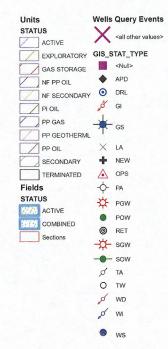
API Number: 4304740592 Well Name: NBU 922-18D3BS

Township 09.0 S Range 22.0 E Section 18

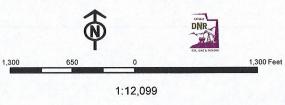
Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared: Map Produced by Diana Mason







United States Department of the Interior

BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 9, 2009

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2009 Plan of Development Natural Buttes Unit Uintah

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2009 within the Natural Buttes Unit, Uintah County, Utah.

API #

WELL NAME

LOCATION

(Proposed PZ Wasatch/MesaVerde)

43-047-40592 NBU 922-18D3BS Sec 18 T09S R22E 1881 FNL 0370 FWL BHL Sec 18 T09S R22E 0877 FNL 0256 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc:

File - Natural Buttes Unit

Division of Oil Gas and Mining

Central Files

Kerr-McGee Oil & Gas Onshore LP



1099 18th Street, Suite 1800 Denver, CO 80202-1918 P.O. Box 173779 Denver, CO 80217-3779 720-929-6000

April 6, 2009

Ms. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 922-18D3BS

<u>T9S-R22E</u>

Section 18: SWNW (Surf), NWNW (Bottom)

Surface: 1881' FNL, 370' FWL

Bottom Hole: 877' FNL, 256' FWL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18D3BS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance.
 Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Lynn Padgett Staff Landman



Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 7, 2009

Kerr-McGee Oil & Gas Onshore, LP P O Box 173779 Denver, CO 80217-3779

Re:

NBU 922-18D3BS Well, Surface Location 1881' FNL, 370' FWL, SW NW, Sec. 18,

T. 9 South, R. 22 East, Bottom Location 877' FNL, 256' FWL, NW NW, Sec. 18,

T. 9 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40592.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc:

Uintah County Assessor

Bureau of Land Management, Vernal Office



Operator:	Kerr-McGee Oil & Gas Onshore, LP			
Well Name & Number	NBU 92	22-18D3BS		
API Number:	43-047-	40592		
Lease:	UTU03	59	·	
Surface Location: SW NW	Sec. 18	T. 9 South	R. 22 East	
Bottom Location: NW NW	Sec18_	T. 9 South	R. <u>22 East</u>	

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 6 In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

	FORM 9					
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0359			
SUNDE	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE					
	sals to drill new wells, significantly deepen ggged wells, or to drill horizontal laterals. U:		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18D3BS			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047405920000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6587 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1881 FNL 0370 FWL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 18	IP, RANGE, MERIDIAN: 3 Township: 09.0S Range: 22.0E Meridian:	S	STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	☐ ACIDIZE	☐ ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
SUBSEQUENT REPORT	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
Date of Work Completion:	☐ DEEPEN ☐ OPERATOR CHANGE	FRACTURE TREAT PLUG AND ABANDON	☐ NEW CONSTRUCTION			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON			
5/29/2009	Usung REPAIR	VENT OR FLARE	WATER DISPOSAL			
☐ DRILLING REPORT	□ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date:	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:			
12 DESCRIPE PROPOSED OF SO						
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELLAccepted by the LOCATION ON 05/29/2009 AT 0830 HRS. Utah Division of Oil, Gas and Mining FOR RECORD ONLY NAME (PLEASE PRINT) PHONE NUMBER TITLE						
Sheila Ùpchego	435 781-7024	Regulatory Analyst				
N/A		DATE 6/1/2009				

	STATE OF UTAH		FORM 9					
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0359					
	RY NOTICES AND REPORTS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE					
	sals to drill new wells, significantly deepen or gged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES					
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18D3BS					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS		9. API NUMBER: 43047405920000						
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE NUMBER: 720 929-6587 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES						
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1881 FNL 0370 FWL		COUNTY: UINTAH						
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 18	P, RANGE, MERIDIAN: 3 Township: 09.0S Range: 22.0E Meridian:	S	STATE: UTAH					
11. CHE	CK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT,	OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	ACIDIZE	ALTER CASING	CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME					
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION					
	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK					
SPUD REPORT	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON					
	☐ TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL					
✓ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION					
6/3/2009	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU ELENBURG RIG 11 ON 05/30/2009. DRILLED 12 1/4" SURFACE HOLE TO 2830'. RAN 9 5/8" 36# J-55 SURFACE CSG. PMP 270 SX HIFILL CLASS (Accepted by the @11.0 PPG 3.82 YIELD. TAIL CMT W/200 SX PREM CLASS G @15.8 PPG 1.1 **Itah Division of YIELD. DROP PLUG ON FLY DISPLACE W/213.5 BBLS H20 270 PSI LIFT @**Diff, **Gas and Mining BBLS/MIN LAND PLUG W/900 PSI BUMP CHECK FLOAT. FLOAT HELD 2***DEFR RECORD ONLY OF LEAD TO SURFACE RAN 200' OF 1" PIPE MIX AND PMP 125 SX PREM CLASS G @15.8 PPG 1.15 YIELD. DISPLACE OUT LEAD CMT 2 BBLS CMT TO SURFACE CMT FELL BACK WILL FILL UP ON NEXT CMT JOB FELL 15'-20'. WORT.								
NAME (PLEASE PRINT) Sheila Upchego	PHONE NUMBER	TITLE Regulatory Analyst						
SIGNATURE	435 781-7024	DATE						
N/A		6/5/2009						

	STATE OF UTAH		FORM 9		
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0359		
	RY NOTICES AND REPORTS OF	_	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	sals to drill new wells, significantly deepen exisgged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18D3BS		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI	9. API NUMBER: 43047405920000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1881 FNL 0370 FWL		COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 18	P, RANGE, MERIDIAN: 3 Township: 09.0S Range: 22.0E Meridian: S		STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
☐ NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL		
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION		
12/24/2009	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:		
12 DESCRIBE PROPOSED OF CO	MPLETED OPERATIONS. Clearly show all pertine	nt details including dates, denths, v			
THE SUBJECT WELL W	VAS PLACED ON PRODUCTION O	N 12/24/2009 AT 12:00 GICAL WELL HISTORY. A L Oil	·		
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst			
SIGNATURE N/A		DATE 12/29/2009			

Operation Summary Report

 Well: NBU 922-18D3BS RED
 Spud Conductor: 5/29/2009
 Spud Date: 5/30/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18E PAD
 Rig Name No: ELENBURG 12/12, H&P 298/298

 Event: DRILLING
 Start Date: 5/30/2009
 End Date: 7/26/2009

Active Datum: RKB @4,920.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0

.evel)	RKB @4,920.00ft	(anove intell	ı O c a	OVVI. U	131312215		(VINVV/O/PIVI/IV/)	1,881.00/VV/0/370.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
5/30/2009	13:00 - 21:00	8.00	MIRU	01	В	Р		MOVE IN AND RIG UP.
	21:00 - 23:00	2.00	MIRU	14	Α	Р		WELD ON CONDUCTOR FLANGE.
	23:00 - 0:00	1.00	MIRU	14	Α	Р		WELD ON ADJUSTABLE FLANGES ON BOWIE LINE.
5/31/2009	0:00 - 1:00	1.00	DRLSUR	14	Α	Р		WELD ON ADJUSTABLE FLANGES ON BOWIE LINE.
	1:00 - 2:00	1.00	DRLSUR	14	Α	Р		HOLD SAFETY MEETING, NIPPLE UP ROT HEAD. AND ROT HEAD EXTENDER.
	2:00 - 3:00	1.00	DRLSUR	06	Α	Р		P/U BENT HOUSING MOTOR 1.86 DEG (SN 8082). P/U 507Z (SN 7015582), P/U MONEL,
	3:00 - 5:00	2.00	DRLSUR	80	В	P		BROKE PONY ROD WHEN FIRST STARTING TO PUMP. REPLACE PONY ROD.
	5:00 - 10:00	5.00	DRLSUR	14	Α	Р		START PUMPING AND WATER POURED OVER STACK. SHUT DOWN, NEED 8 " ROT HEAD RUBBER. WAIT FOR 8 " ROT HEAD RUBBER FOR WEATHERFORD ROT HEAD.
	10:00 - 10:30	0.50	DRLSUR	14	Α	Р		STAB 8" ROT HEAD RUBBER AND INSTALL.
	10:30 - 11:00	0.50	DRLSUR	02	D	Р		DRILL 40-65',
	11:00 - 12:30	1.50	DRLSUR	06	Α	Р		LD MONEL AND P/U DIRECTIONAL TOOLS, CORR. DIR. TOOLS.
	12:30 - 16:00	3.50	DRLSUR	02	D	Р		DRILL SLIDE 65'-340' WOB 10-12K, ROT 55, PSI ON/OFF 500/800 GPM 680 CIRC RESERVE PIT.
	16:00 - 16:30	0.50	DRLSUR	14	В	Р		CHANGE OUT FROM 8" ROT HEAD RUBBER TO 4 1/2" ROT HEAD RUBBER.
	16:30 - 0:00	7.50	DRLSUR	02	D	Р		DRILL SLIDE 340'- 808'. WOB 10-12K ROT 55, PSI ON/OFF 700/1000, GPM 680, CIRC RESERVE PIT, SLIDE 40'/HR, ROT 80' HR.
6/1/2009	0:00 - 11:30	11.50	DRLSUR	02	D	Р		DRILL AND SLIDE 808'-1423' WOB 12K, ROT 45, ON/OFF PSI 1200/1450, DRILL SLIDING 16%
	11:30 - 12:00	0.50	DRLSUR	07	Α	₽		RIG SERVICE.
6/2/2009	12:00 - 0:00 0:00 - 6:00	12.00 6.00	DRLSUR	02	D D	P P		DRILL 1423'- 1919' WOB 10-12K, TORQUE LIMITED ON RIG. 3000' FT/TOR MAX. DRILL W/ REDUCED WT. ROT 40, ON OFF PSI 1200/1450 SLIDING 16% HOLD DEVIATION OF 5 DEGREES AND AZI 353.5 1'LEFT AND 23' HIGH OF LINE. DRILL AND SLIDE 1919'- 2106'(187'/32'/HR) WOB
						_		10K, ROT 35, PSI ON/OFF 1450/1200, GPM 680. REDUCED WOB DUE TO RIG UNABLE TO DELIVER ENOUGH TORQUE WHILE DRILLING
	6:00 - 6:30	0.50	DRLSUR	07	A	P -		RIG SERVICE
	6:30 - 0:00	17.50	DRLSUR	02	D	Р		DRILL 2106'- 2680' (574'/ 33'/HR) WOB 10K ROT 35, PSI ON/OFF 1450/1200, GPM 680. RULL RETURNS, NO LOSSES OR GAINS. SLIDE 16.8% OF TIME, 4' LEFT AND 22' ABOVE LINE.
6/3/2009	0:00 - 4:30	4.50	DRLSUR	02	D	P		DRILL SLIDE 2680'-2830' (SLIDE 11%) WOB 8-10K, RPM 25, TORQUE 2900 TD SURFACE 6/3/2009 04:30
	4:30 - 5:00	0.50	CSG	05	Α	Р		CIRC AND CLEAN HOLE FOR CSG.
	5:00 - 7:00	2.00	CSG	06	D	Р		LAY DOWN DRILL STRING, AND DIRECTIONAL TOOLS.
	7:00 - 12:00	5.00	CSG	12	C	Р		RIG UP TO RUN CSG, RUN 64 JTS OF 9-5/8" 36#, J-55, LT&C 2807' KB, FLOAT @ 2760' KB.
	12:00 - 12:30	0.50	CSG	05	D	Р		CIRC DOWN CSG, WHILE RIGGING UP PROPETRO CEMENTER.
	12:30 - 14:30	2.00	CSG	12	E	Z		PROPETRO BLEW HYDRALIC HOSE, WAIT ON REPAIRS. CIRC W/ RIG PUMPS,

12/29/2009 1:43:05PM

Operation Summary Report

 Well: NBU 922-18D3BS RED
 Spud Conductor: 5/29/2009
 Spud Date: 5/30/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18E PAD
 Rig Name No: ELENBURG 12/12, H&P 298/298

 Event: DRILLING
 Start Date: 5/30/2009
 End Date: 7/26/2009

 Active Datum: RKB @4,920.00ft (above Mean Sea Level)
 UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0

evel) Da te	Time	Duration	Phase	Code	Sub	PAU	MD From	Operation
	Start-End	(hr)			Code		(ft)	
	14:30 - 16:30	2.00	CSG	12	E	Р		START 40 BBLS PRE FLUSH H20, START 270 SX (183.6 BBLS) 11.0# 3.82 YD, 23 GAL/SK OF LEAD HI-FILL TYPE 2 CEMENT, START TAIL CEMENT 200 SX (40.9 BBLS) 15.8# 1.15YD, 5 GAL/SK. DROP PLUG ON FLY, DISPLACE W/213.5 BBLS OF H20, 270 PSI LIFT @ 3.5/BBLS MIN, LAND PLUG W/ 900 PSI BUMP, CHECK FLOAT, FLOAT HELD.20 BBLS OF LEAD TO SURFACE, MIX AND PUMP 125 SX(25.6 BBLS) OF 15.8#, 1.15 YD, 5 GAL SK, DOWN 200' OF 1", DISPLACE OUT LEAD CEMENT. 2 BBLS CEMENT TO SURFACE. CEMENT FELL. WILL FILL UP ON NEXT CEMENT JOB. FELL15-20'. RIG DOWN CEMENTERS.
	16:30 - 17:30	1.00	CSG	01	Α	P		RIG DOWN RIG, BOWIE LINE, CLEAN OUT CELLAR FOR WELDER
	17:30 - 18:30	1.00	RDMO	14	Α	Р		CUT OFF CONDUCTOR, SET 9 5/8 CSG ELEVATORS, LAYDOWN LANDING JT. RELEASE RIG 6/3/3009 18:30.
7/14/2009	16:00 - 20:00	4.00	RDMO	01	E	Р		HSM W/ MOUNTAIN WEST& WESTROC, RD/MOVE CAMPS RU,TRANSFER MUD,& 400 BBL UP RIGHTS,SET OUT CMT SILOS & FRAC TANKS,MOVE PIPE TUBS, MOVE MUD & CHEMICALS,2 BED TRUCKS,2 HAUL TRUCKS,1 FORK LIFT,
	20:00 - 0:00	4.00	RDMO	01	E	Р		PREP RIG FOR TRUCKS
7/15/2009	0:00 - 6:00	6.00	DRLPRO	01	E	Р		PREP RIG FOR TRUCKS/SAFETY MEETING/0530 W/ WESTROC,J&C CRANE,RIG CREWS
	6:00 - 21:00	15.00	DRLPRO	01	B .	P		RIG DOWN EQUIPMENT / LOWER DERRICK & LOAD OUT, LOWER SUB, MOVE EQUIPMENT TO NEW LOCATION / SET PITS, SHAKERS, PUMPS, MAIN GENERATORS, SCR HOUSE, MCC HOUSE, FUEL TANK, SKID PACKAGE, DRAWWORKS, MUD BOAT SKID AND ALL COMPONETS OF THE SUB-STRUCTURE, RAISE SUB & PIN IN PLACE W/ 5 HAUL TRUCKS, 5 BED TRUCKS, 2 FORKLIFTS, 1 CRANE. / 100% MOVE 60% RIGGED UP., (RELEASED 3 BED TRUCKS, 4 HAUL TRUCKS, 1 FORKLIFT)
	21:00 - 0:00	3.00	DRLPRO	21	С	Р		WAIT ON DAYLIGHT TO RIG UP
7/16/2009	0:00 - 6:00	6.00	DRLPRO	21	С	Р		WAIT ON DAYLIGHT
	6:00 - 0:00	18.00	DRLPRO	01	В	P		ATTACH DERRICK TO FLOOR, RAISE DERRICK,UP @0930 / ATTACH BOP HANDLER & DOGHOUSE - RAISE TO POSITION /SET IN FLOW LINE & REMAINING EQUIP,TRUCKS GONE 1100,CRANE 1300/ RIG UP MUD PITS / RUN ELECTRICAL LINES, WATER LINES & AIR LINES,POWER UP ELECTRICAL,SPOOLUP DRAWWORKS,INSTALL YELLOW DOG,CIRC PITS,INSTALL BAIL & ELEVATORS ON TOP DRIVE,INSTALL GROUNG RODS,ANNUAL INSPECTION ON BOP SHOWED WORN RAM BODY HOUSING IN BOP CAUSING WEAR TO RAM BODY SEALS
7/17/2009	0:00 - 13:00	13.00	DRLPRO	14	A	P		ND BOP STACK, ANNULAR, MUD CROSS & VALVES, CHANGE OUT CONDEMNED PREVENTERS, NIPPLE UP, (BOP TO BE INSTALLED ARRIVED ON LOC @ 0130 HRS) CHANGING FROM FMC TO CAMERON WELL HEADS, INSTALL CAMERON DRILLING CONNECTOR, SPACER SPOOL PREVENTER, ANNULAR, SPACER SPOOL ROTATI HEAD, WING VALVES, CHOKE LINE, HYD LINES & FUNCT TEST,

12/29/2009 1:43:05PM

Operation Summary Report

Well: NBU 922-18D3BS RED Spud Conductor: 5/29/2009 Spud Date: 5/30/2009 Project: UTAH-UINTAH Site: NBU 922-18E PAD Rig Name No: ELENBURG 12/12, H&P 298/298 Event: DRILLING Start Date: 5/30/2009 End Date: 7/26/2009

Active Datum: Level)	RKB @4,920.00ft ((above Mear	n Sea	UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0		1,881.00/W/0/370.00/0/0		
Date	Time Start-End	Duration (hr)	Phase	Code	Sub	P/U	MD From (ft)	Operation
	13:00 - 18:00	5.00	DRLPRO	15	A	P	, V.Y	HSM, PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES -FUNCT TEST CLOSING UNIT.
	18:00 - 18:30	0.50	DRLPRO	14	В	P		INSTALL WEAR BUSHING
	18:30 - 20:00	1.50	DRLPRO	07	С	Р		CHANGE OUT SAVER SUB, CLEAN FLOOR
	20:00 - 22:30	2.50	DRLPRO	06	Α	Р		PICK UP DIRECTIONAL TOOLS, MAKE UP BIT, SCRIBE DIRECTIONAL TOOLS
	22:30 - 23:00	0.50	DRLPRO	14	В	Р		INSTALL ROTATING HEAD
	23:00 - 0:00	1.00	DRLPRO	06	Α	Ρ		HSM W/ WESTATES, RU TO PU BHA
7/18/2009	0:00 - 3:00 3:00 - 6:00	3.00	DRLPRO	06	A	P		PU BHA & DP TAG CMT @ 2757', FILL PIPE PRESSURED UP, UNABLE TO CIRC, RD CASERS
	6:00 - 8:00	3.00 2.00	DRLPRO DRLPRO	24 06	L A	X X		TOH STRING PLUGGED, CLEAN LCM FROM MWD,& ORIENT TOOLS, TEST MWD & MTR TIH TAG CMT F/2757- INSTALL ROT HEAD
	8:00 - 9:30	1.50	DRLPRO	06	A	P		,BREAK CIRC
								DRILL CMT F/2757-2845,FLOAT @ 2777-SHOE @2815
	9:30 - 15:30	6.00	DRLPRO	02	D	P		DRILL (ROTATE & SLIDE) F/ 2845' - T/ 3364' = 519' @ 86.5 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 40 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1530-1300 / TQ ON/OFF 6K/2K / PU/SO/ROT 115/95/105 / H2O + POLY / SLID 232' IN 170 MINUTES = 42% OF FOOTAGE & 43% OF HRS .
	15:30 - 16:00	0.50	DRLPRO	07	Α	Р		RIG SERVICE,WORK PIPE RAMS
	16:00 - 0:00	8.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/3491' - T/3960' = 469' @ 78.1 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 35-45 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1650-1325 / TQ ON/OFF 8K/4K / PU/SO/ROT 130/105/115 / H2O + POLY / SLID 246' IN 4 HRS = 41% OF FOOTAGE & 50% OF HRS
7/19/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE & SLIDE) F/3960' T/ 4353' = 393' @ 65.5 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 35-45 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1650-1325 / TQ ON/OFF 8K/4K / PU/SO/ROT 130/105/115 / H2O + POLY / SLID 95' IN 2.2 HRS = 24% OF FOOTAGE & 36.2% OF HRS
	6:00 - 16:00	10.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/4353' T/ 4973' = 620' @ 62.0 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 35-45 / MTR 104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1810-1425 / TQ ON/OFF 9/5K / PU/SO/ROT 155/106/128 / H2O + POLY / SLID 337' IN 6.7 HRS=56.1 OF FOOTAGE & 67.5 % OF HRS.
	16:00 - 16:30	0.50	DRLPRO	07	Α	Р		RIG SERVICE,WORK PIPE RAMS
	16:30 - 0:00	7.50	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/4973' T/ 5450' = 477' @ 63.6 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2100-1650 / TQ ON/OFF 9/4K / PU/SO/ROT 156/117/128 / H2O + POLY / SLID 140' IN 3.42 HRS=29.6 OF FOOTAGE & 45.5 % OF HRS.

12/29/2009

RECEIVED_December 29, 2009

				US	ROC	KIES F	REGION	
			O	perat	Jon S	umm	ary Repor	
Well: NBU 922	2-18D3B\$ RED	<u> 2007 (1908), 20 mete</u>	Spud C	onductor	:: 5/29/2(009	Spud Date: 5	6/30/2009
Project: UTAH	I-UINTAH		Site: NB	3U 922-18	8E PAD			Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLI	NG		Start Da	ate: 5/30/2	2009	\top	The same of the sa	End Date: 7/26/2009
Active Datum: Level)	RKB @4,920.00ft ((above Mear	n Sea	UWI: 0	/9/S/22/	E/18/0/S	WNW/6/PM/N/1	1,881.00/W/0/370.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/20/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P	L	DRILL (ROTATE & SLIDE) F/5450' T/ 6000' = 550' @ 91.6 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1750-1450 / TQ ON/OFF 9/4K / PU/SO/ROT 156/117/128 / H2O + POLY / SLID 56' IN 1. HR=10.10F FOOTAGE & 16.6% OF HRS.
	6:00 - 16:30	10.50	DRLPRO		D	Р		DRILL (ROTATE & SLIDE) F/6000' T/6961' = 961' @ 91.5 FPH / H2O + POLYMER / WOB 14/18 RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1900-1525 / TQ ON/OFF 12/7K / PU/SO/ROT198/125/1160 / H2O + POLY / SLID 104' IN 3 HRS=10% OF FOOTAGE & 28% OF HRS.
	16:30 - 17:00	0.50	DRLPRO		Α	Р		RIG SERVICE,WORK PIPE RAMS
	17:00 - 0:00	7.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/6961' T/7375' = 414' @ 59.1 FPH / H2O + POLYMER / WOB 14/20/ RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1950-1630 / TQ ON/OFF 13/11K / PU/SO/ROT 210/1140/1165 / H2O + POLY / SLID 10' IN .25 HRS
7/21/2009	0:00 - 6:00	6.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/7375' T/7650' = 275' @ 45.8 FPH / WOB 14/20/ RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1950-1630 / TQ ON/OFF 13/11K / PU/SO/ROT 210/140/165 / CLOSE IN PITS @ 7500' START MUD UP VIS 28 WT 8.8 / SLID 25' IN 1 HR,
	6:00 - 15:30	9.50	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/7650' T/8194 = 544' @ 57.2 FPH / WOB 14/20/ RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2220-2000 / TQ ON/OFF 14/10K / PU/SO/ROT 245/140/175 MW 10.0 VIS 34 SLID 40' IN 1.5 HRS=14%OF FOOTAGE 13.6% OF TIME
	15:30 - 16:00	0.50	DRLPRO	07	Α	Р		RIG SERVICE, WORK PIPE RAMS, BOP DRILL
	16:00 - 0:00	8.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/8194' T/8490 = 296' @ 37 FPH / WOB 14/20/ RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2625-2200 / TQ ON/OFF 14/12K / PU/SO/ROT 245/140/178 MW 10.4 VIS 34 SLID 41' IN 1.75 HRS=14.5%OF FOOTAGE 21.8% OF TIME
7/22/2009	0:00 - 17:00	17.00	DRLPRO	02	D	Р		0000- DRILL (ROTATE & SLIDE) F/8490' T/9131' = 480' @ 41.7 FPH / WOB 14/20/ RPM TOP DRV 35-45 / MTR104 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 1950-1630 / TQ ON/OFF 13/11K / PU/SO/ROT 210/1140/1165 MUD VIS 46 WT 11.0
	17:00 - 21:30	4.50	DRLPRO	06	Α	Р		TOH L/D MWD TOOLS
	21:30 - 22:30	1.00	DRLPRO	06	Α	Р		L/D MWD TOOLS, P/U NEW MUD MOTOR .16 STRIGHT
	22:30 - 0:00	1.50	DRLPRO	06	A	P -		TIH WITH BIT # 2
7/23/2009	0:00 - 3:00	3.00	DRLPRO	06	Α	Р		TRIP IN HOLE W/ BIT # 2 HTC Q506HX TAGED BRIDEG HAD TO WASH @ 5330'

12/29/2009 1:43:05PM

3:00 - 17:30

17:30 - 18:00

18:00 - 21:30

14.50

0.50

3.50

DRLPRO

DRLPRO

DRLPRO

02

07

02

D

Α

D

Ρ

Ρ

Ρ

BRIDEG HAD TO WASH @ 5330'

ROP 42.4 MUD WT 11.0 VIS 42

ROP 33.4 MUD WT 11.6 VIS 40

RIG SER.

DRILL F/ 9139 TO 9755 WOB 20 ROT 35 100 SPM ON BOTTOM 2425 OFF 2200 PSI TORQ ON BOTTOM 15 OFF 13 PU 300 SO 140 ROT 186K

DRILL F/ 9755 TO 9872 WOB 20 ROT 35 100 SPM ON BOTTOM 2425 OFF 2200 PSI TORQ ON

BOTTOM 15 OFF 13 PU 300 SO 140 ROT 186K

RECEIVED December 29, 2009

US ROCKIES REGION

Operation Summary Report

Spud Date: 5/30/2009 Spud Conductor: 5/29/2009 Well: NBU 922-18D3BS RED Rig Name No: ELENBURG 12/12, H&P 298/298 Site: NBU 922-18E PAD Project: UTAH-UINTAH Start Date: 5/30/2009 End Date: 7/26/2009 Event: DRILLING

	RKB @4,920.00ft	(above Mean	Sea		9/S/22/	E/18/0/SV	VNW/6/P M /N/1	I,881.00/W/0/370.00/0/0
Level)	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	21:30 - 0:00	2.50	DRLPRO	08	В	Z	. Xil	DRAW WORKS SHUT DOWN SHOWING GROUND FAULT # 8 CHECKED ALL PLUG IN RESET SCR HAVE ELECT. COMING OUT GRAND JUNKSHON
7/24/2009	0:00 - 4:00	4.00	DRLPRO	80	В	Z		TROUBLE SHOOT DW-VFD FAILURE W/ ELECTRITON FOUND BAD INVERTOR CHANGED IT OUT
	4:00 - 16:30	12.50	DRLPRO	02	D	Р		DRILL F/ 9872 TO 10125 WOB 25 ROT 35 STKS 100 0N BOTTOM 2700 OFF 2500 TORQUEON BOTTOM 18 OF 15 PU 325 SO 140 ROT 197 MW 11.7 VIS 50
	16:30 - 18:30	2.00	DRLPRO	05	Α	Р		CIRC. COND FOR SHORT TRIP TO SHOE
	18:30 - 0:00	5.50	DRLPRO	06	Α	Р		TOH FOR SHORT TRIP TO SHOE PUMPED OUT 10 STD,
7/25/2009	0:00 - 0:30	0.50	DRLPRO	06	E	Р		TIH FOR SHORT TRIP
	0:30 - 2:30	2.00	DRLPRO	05	Α	Р		CIRC. COND. FOR LOGS
	2:30 - 3:00	0.50	DRLPRO	10	В	Р		DROPED MULIT SHOT TOOL
	3:00 - 7:00	4.00	DRLPRO	06	Α	P		TOH FOR LOGS
	7:00 - 8:00	1.00	DRLPRO	06	Е	Р		RETRIEVE SINLG SHOT SURVEY TOOL, L/D FLEX MONEL, MUD MOTOR
	8:00 - 14:00	6.00	DRLPRO	11	D	Р		HELD SAFTY MEETING WITH LOGER, RIG UP & LOG WELL LOGER TD 10124' DRILLER TD 10125' LOGS WENT GOOD
	14:00 - 15:30	1.50	DRLPRO	12	Α	Р		HELD SAFTY MEETING, RIG UP CASING CREW TOOLS
	15:30 - 0:00	8.50	DRLPRO	12	С	Р		RUN 4.5 CASIG 11.6 242 JTS CASIG 8 JTS. WAS P110 234 JTS I-80 JTS SHOE @ 10109 FLOAT COLLAR @ 10067'
7/26/2009	0:00 - 2:00	2.00	CSG	05	Α	Р		CIRC. 4.5 CASING HAD 10 TO 15' FLAR
	2:00 - 4:30	2.50	CSG	12	E	Р	-	CMT 4. 5 CSG. 276 BBLS LEAD 11.7 620 SX CMT YIELD 2.50 5% EX TAIL 14.3 1245 SX CMT YIELD 1.31 DISPLACED W/ 156.5BBLSCLAY FIX WATER FLOATS HELD 500 PSI OVER BUMPED PLUG W/ 3279 PSI LOST RETURNES LAST 10 BBL OF DISPLACEMENT RETRUNED 30 BBLS CMT TO PIT
	4:30 - 5:30	1.00	CSG	12	Ε	Р		RIG DOWN CEMENTER
	5:00 - 5:30	0.50	SUSPEN	01	Ε	Р		RIG RELEASED @ 05:30 7/26/2009

Operation Summary Report

 Well: NBU 922-18D3BS RED
 Spud Conductor: 5/29/2009
 Spud Date: 5/30/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18E PAD
 Rig Name No:

 Event: COMPLETION
 Start Date: 12/4/2009
 End Date: 12/22/2009

Active Datum: RKB @4,920.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0

Date	Sta	ime rt-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
12/6/2009		- 12:30	2.50	WO/REP	30	Α	Р	1 7	RIG UP RIG, NU BOPS RU FLOOR & TBG EQUIP.
12/7/2009		- 18:30 - 7:30	6.00 0.50	WO/REP	31 48	I	P P		PU 37/8 BIT & 317 JTS 23/8 L-80 TAG @ 10067.86' PBTD LAST 3 JTS GOING TROUGH SOFT FILL. L/D 3 JTS TBG EOT @ 9977.86' SWI SDFN. HSM. DRIVING IN WINTER CONDITIONS.
12/1/2000		- 19:30	12.00	WO/REP	31	ı	Р		SICP 0 PSI, PU 3 JTS TBG TAG BACK UP ON
	1.00	19.00	12.00	WOME		,	•		PBTD @ 10067' CIRC WELL CLEAN W/ 220 BBLS 2% TEST CSG TO 3500# PSI FOR 10 MIN OK. L/D 317 JTS 23/8 L-80 AND BIT SUB, BIT BACKED OU OF SUB AND WAS LEFT IN THE HOLE. RU DELSCO SLICK LINE TRUCK RIH TAG UP ON BIT @ 1130' PUSH BIT TO 8900' NOT MAKING ANY HOLE TOOLS TRYING TO GET STUCK. POOH RD WIRE LINE. RESPOT TBG TRAILOR SWI SDFN.
12/8/2009		- 7:30	0.50	WO/REP	48		Р		HSM, WATCHING OUT FOR OTHER EMPLOYES WHILE WORKING TIRED.
		- 14:00	6.50	WO/REP	31	I	Р		O SICP, PU 37/8 MILL & 281 JTS 23/8 L-80 TBG TAG BIT @ 8900' HAVING TO WORK BIT TROUGH CSG COLLARS GOT BIT ON BTM @ 10.065'. W/ TOTAL 317 JTS 23/8 L-80.
		- 18:30	4.50	WO/REP	31	I	Р		L/D 317JTS 23/8 J-55 AND MILL.
12/9/2009	7:00	- 19:00	12.00	COMP	33	D	Р		OPEN WELL 0#. RDMO RIG. ND BOP. NU FRAC VALVES & WH SLEEVE. MIRU B&C QUICK TEST. PSI TEST CSG & BOTH FRAC VALVES T/ 7000#. GOOD TEST. BLEED OFF PSI. MIRU CUTTERS WL & SUPERIOR FRAC SERV.
									STG 1) PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE 90 & 120 DEG PHASING. RIH PERF F/ 9792'-94', 3 SPF, 6 HOLES. 9830'-32', 3 SPF, 6 HOLES. 9961'-63', 4 SPF, 8 HOLES. 9994'-98', 3 SPF, 12 HOLES. 10050'-52', 4 SPF, 8 HOLES. POOH. WINTERIZE WELL HEAD. SWI, SDFN.
12/11/2009	7:00	- 18:00	11.00	COMP	36	В	P		STG 1)HAD T/ SEND 2 TRUCKS T/ TOWN. (1 TRUCK POWER END STARTED SMOKING REALLY BAD. 1 TRUCK FLUID END WAS FROZE SOLID. UNFREEZE THAT TRUCK IN SHOP.) WINTERIZE ALL WELL HEADS. 17:00 SWI, SDFN.

12/29/2009 1:44:07PM 1

Operation Summary Report

Spud Conductor: 5/29/2009 Spud Date: 5/30/2009 Well: NBU 922-18D3BS RED

Project: UTAH-UINTAH	Site: NBU 9	22-18E PAD	BE PAD Rig Name No:				
Event: COMPLETION	Start Date:	12/4/2009			End Date: 12/22/2009		
Active Datum: RKB @4,920.00ft (above Mean Level)	Sea U\	WI: 0/9/S/22/E	E/18/0/S	SWNW/6/PM/N/	/1,881.00/W/0/370.00/0/0		
Date Time Duration Start-End (hr)	Phase C	ode Sub Code	P/U	MD From (ft)	Operation		
12/12/2009 7:00 - 18:00 11.00	COMP	36 B	P		HSM. SIME OPS. WAS TOLD BY SUPERIOR FRAC SERV WE WOULD HAVE 6 PUMPS ON LOC TODAY, ONLY HAD 5. HAD T/ REPACK 2 PUMP FIRST THING T/DAY. ((2 HRS DOWN TIME.)) 09:17 FOUND BLEED OFF LINE WAS FROZE. PUMP OUT PLUG. STG 1)09:35 OPEN WELL. WHP 1345 PSI, BRK 4785 PSI @ 4.3 BPM. ISIP 3142 PSI, FG .76. 0945 SD. PUMP 57 BBLS OF PREPAD, HAD T/ SD BECAUSE PACKING ON PUMP #2 GIVE UP. THAT ONLY LEFT US W/ 4 PUMPS. MAKE REPAIRS. 6TH TRUCK PULLED ON LOC @ 10:00. 10:52 OPEN WELL CONT FRAC. PUMP 100 BBLS @ 50 BPM @ 4900 PSI = 100% HOLES OPEN. MP 6355 PSI, MR 50.3 BPM, AP 5055 PSI, AR 49.9 BPM, ISIP 2726 PSI, FG .72, NPI -416 PSI. PMP 2415 BBLS SW & 83,113 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 88,113 LBS, 11:56 SWI. X-OVER T/ GREEN WELL. STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE, 90 & 120 DEG PHASING. RIH SET CBP @ 9656' P/U PERF F/ 9570'-74', 3 SPF, 12 HOLES. 9592'-96', 4 SPF, 16 HOLES. 9622'-26', 4 SPF, 16 HOLES. 9700H. 13:51 OPEN WELL. WHP 1550 PSI, MR 51 BPM, AP 4942 PSI, AR 50.2 BPM, ISIP 2614 PSI, MR 51 BPM, AP 4942 PSI, AR 50.2 BPM, ISIP 2773 PSI, FG .72, NPI 159 PSI. PMP 1104 BBLS SW & 35,525 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 40,525 LBS. 14:20 SWI. X-OVER T/ YELLOW WELL. STG 3)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, 36 HOLE SIZE, 90 & 120 DEG PHASING. RIH SET CBP @ 9444' P/U PERF F/ 9244'-46', 4 SPF, 8 HOLES. 9280'-84', 3 SPF, 12 HOLES. 9280'-84', 3 SPF, 8 HOLES. 9280'-84', 3 SPF, 12 HOLES. 9280'-84', 3 SPF, 12 HOLES. 9280'-84', 3 SPF, 12 HOLES. 9280'-84', 3 SPF, 8 HOLES. 9280'-84', 3 SPF, 8 HOLES. 9280'-945'-945'-945'-945'-945'-945'-945'-945		

BPM, ISIP 2391 PSI, FG .69, NPI 131 PSI. PMP 1356 BBLS SW & 49,199 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 54,199 LBS, 18:00 SWI, SDFN.

2260 PSI, FG .67.

HOLES OPEN.

PUMP 100 BBLS @ 48 BPM @ 4600 PSI = 100%

MP 5357 PSI, MR 50 BPM, AP 4771 PSI, AR 49.5

2 12/29/2009 1:44:07PM

Operation Summary Report Spud Conductor: 5/29/2009 Spud Date: 5/30/2009 Well: NBU 922-18D3BS RED Project: UTAH-UINTAH Site: NBU 922-18E PAD Rig Name No: **Event: COMPLETION** Start Date: 12/4/2009 End Date: 12/22/2009 UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0 Active Datum: RKB @4,920.00ft (above Mean Sea Level) Date Time Duration Phase Code Sub MD From Operation Start-End (hr) Code 12/13/2009 7:00 - 18:00 COMP 36 07:00 OPEN WELL. 11.00 В STG 4) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 9144' P/U PERF F/ 8930'-32', 3 SPF, 6 HOLES. 8980'-84', 3 SPF, 12 HOLES. 9080'-82', 4 SPF, 8 HOLES. 9112'-16', 4 SPF, 16 HOLES. POOH. 10:41 OPEN WELL. WHP 130 PSI, BRK 3100 PSI @ 4.5 BPM. ISIP 2058 PSI, FG .66. PUMP 100 BBLS @ 47 BPM @ 4750 PSI = 100% HOLES OPEN. MP 5720 PSI, MR 48.7 BPM, AP 4742 PSI, AR 48.1 BPM, ISIP 2383 PSI, FG .70, NPI 325 PSI. PMP 1320 BBLS SW & 47,102 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 52.102 LBS. 11:17 SWI, X-OVER T/ GREEN. STG 5) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8895' P/U PERF F/ 8626'-30', 3 SPF, 12 HOLES. 8640'-42', 3 SPF, 6 HOLES. 8798'-00', 4 SPF, 8 HOLES. 8860'-65', 3 SPF, 15 HOLES. POOH. 15:42 OPEN WELL. WHP 1665 PSI, BRK 3361 PSI @ 4.0 BPM. ISIP 2076 PSI, FG .67. 15:48 SD, CHECK VALVE ON MANIFOLD CAME 16:04 MAKE REPAIRS CONT FRAC. PUMP 100 BBLS @ 44 BPM @ 5400 PSI = 100% HOLES OPEN. MP 5831 PSI, MR 50.3 BPM, AP 4371 PSI, AR 44 BPM, ISIP 2533 PSI, FG .72, NPI 457 PSI. PMP 1712 BBLS SW & 64,008 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 69,008 LBS, 16:49 SWI, X-OVER T/ YELLOW. STG 6)P/U 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE, 90 & 120 DEG PHASING, RIH SET CBP @ 8546' P/U PERF F/ 8340'-44', 3 SPF, 12 HOLES. 8402'-04', 3 SPF, 6 HOLES. 8450'-54', 4 SPF, 16 HOLES. 8514'-16', 4 SPF, 8 HOLES.

1:44:07PM 12/29/2009 3

Ρ

12/14/2009

6:30 - 7:00

0.50

COMP

48

POOH. 18:00 SWI FN.

HSM. FRACING & PERFORATING

							EGION Bry Report	
Well: NBU 922	.18D3BS RED		Note to the last	onductor	Section of the		Spud Date: 5/3	
Project: UTAH-			- 1 - 1	SU 922-1				Rig Name No:
Event: COMPL			Start Da	ite: 12/4/	2009			End Date: 12/22/2009
	RKB @4,920.00ft ((above Mean				E/18/0/S		
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:08 - 9:39 9:39 - 14:00	1.52 4.35	COMP	36	В	P		STG 6) WHP 2,525 PSI, BRK @ 4,825 PSI @ 4.5 BPM, ISIP 2,742 PSI, FG .76. PUMP 100 BBLS @ 50 BPM @ 5,500 PSI = 100% HOLES OPEN. MP 6,571 PSI, MR 50.2 BPM, AP 4,826 PSI, AR 49.7 BPM, ISIP 2,514 PSI, FG .73 NPI -228 PSI. PUMPED 1,357 BBLS OF SW & 45,300 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP PUMPED 50,300 LBS. STG 7) PU 4 1/2' HAL CBP & 3 1/8" EXP GNS, 23 GRM, .36 HOLES, 90 & 120 DEG PHASING. RIH SET CBP @ 8,264' & PERF 8,232' - 34' 4SPF, 8,150' - 52' 4SPF, 8,120' - 22' 3SPF, 8,088' - 92' 3SPF, 8,010' - 12' 3SPF, 40 HOLES. WHP 1,330 PSI, BRK @ 2,885 PSI @ 4.3 BPM, ISIP 1,900 PSI, FG .69. PUMP 100 BBLS @ 50.1 BPM @ 4,905 PSI = 100% HOLES OPEN. MP 5,571 PSI, MR 50.2 BPM, AP 4,428 PSI, AR 49.8 BPM, ISIP 2,175 PSI, FG .70 NPI 275 PSI. PUMPED 1,548 BBLS OF SW & 55,215 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP PUMPED 60,215 LBS.
	14:00 - 15:00	1.00	COMP	34	ł	P		KILL PLG) PU 4 1/2" HAL CBP RIH SET @ 7,960' RDMO 0NE OF THE CUTTERS TRIKS.
12/21/2009	7:00 - 7:30	0.50	COMP	48		Р		HSM, MOVEING RIG AND RIGGING UP.
	7:30 - 18:00	10.50	COMP	31	l	Р		RIG DWN OFF NBU 922-18ES2, MOVE OVER RIG UP ON NBU 922-18D3BS. ND WH NU BOPS, RU FLOOR & TBG EQUIP. TALLY & PU 37/8 BIT, POBS, 1.875 X/N & 248 JTS 23/8 L-80 OFF FLOAT, EOT @ 7899' RU SWIVEL, SWI SDFN.
12/22/2009	7:00 - 7:30	0.50	COMP	48		Р		HSM, DRILLING PLUGS AND LANDING TBG, UNDER PRESSURE.

			C				EGION ary Rep or	
Well: NBU 922-	-18D3BS RED	A Jones Caree and a		onductor		-	Spud Date: 5	
Project: UTAH-				3U 922-1			_pau Date. D	Rig Name No:
Event: COMPL			-	ate: 12/4/2				End Date: 12/22/2009
	RKB @4,920.00ft	(above Mean						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 18:00	10.50	COMP	44	С	Р		SICP 0, BREAK CIRC CONVENTIONAL RIH.
								C/O 0'SAND TAG 1ST PLUG @ 7960'DRL PLIG IN 7 MIN, 350 # PSI INCREASE RIH.
								C/O 65 ' SAND TAG 2ND PLUG @ 8264' DRL PLIG IN 4 MIN, 450 # PSI INCREASE RIH.
								C/O 65' SAND TAG 3RD PLUG @ 8546' DRL PLIG IN 7 MIN, 400 # PSI INCREASE RIH.
								C/O 30' SAND TAG 4TH PLUG @ 8895' DRL PLIG IN 7 MIN, 600 # PSI INCREASE RIH.
								C/O 3O' SAND TAG 5TH PLUG @ 9146' DRL PLIG IN 8 MIN, 300 # PSI INCREASE RIH.
								C/O 30' SAND TAG 6TH PLUG @ 9444' DRL PLIG IN 8 MIN, 400 # PSI INCREASE RIH.
								C/O 30' SAND TAG 7TH PLUG @ 9656' DRL PLIG IN 5 MIN, 500 # PSI INCREASE RIH. C/O TO PBTD @ 10,065' CIRC WELL FOR 1/2 HR. HANG SWIVEL BACK, L/D 18 JT TBG, RD SWIVEL. LAND TBG ON 299 JTS 23/8 L-80.RD FLOOR ND BOPS NU WH, DROP BALL PUMP OFF BIT W/ 40 BBLS WTR. TURN WELL OVER TO FB CREW.
								KB=26' 71/16 CAMERON HANGER= .83' 299 JTS 23/8 L-80= 9498.09' POBS= 2.20' EOT @ 9527.12'
								324 JTS HAULED OUT 299 LANDED 25 TO RETURN.
12/23/2009	7:00 -			33	A			TWTR 11,122 BBLS TWR 1500 BBLS TWLTR 9622 BBLS 7 AM FLBK REPORT: CP 1800#, TP 2450#, 20/64"
								CK, 47 BWPH, MEDIUM SAND, LIGHT GAS TTL BBLS RECOVERED: 2261 BBLS LEFT TO RECOVER: 8861
12/24/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 3200#, TP 1950#, 20/64" CK, 36 BWPH, MEDIUM SAND, - GAS TTL BBLS RECOVERED: 3220 BBLS LEFT TO RECOVER: 7902
	12:00 -		PROD	50				WELL TURNED TO SALE @ 1200 HR ON 12/24/09 - FTP 1950#, CP 3200#, 1.7 MCFD, 36 BWPD, 20/64 CK
12/25/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 3200#, TP 1950#, 20/64" CK, 32 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 4048 BBLS LEFT TO RECOVER: 7074
12/26/2009	7:00 -			33	Α			7 AM FLBK REPORT: CP 2900#, TP 1900#, 20/64" CK, 27 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 4729

12/29/2009 1:44:07PM 5

33

7:00 -

12/27/2009

BBLS LEFT TO RECOVER: 6393

CK, 22 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 5323 BBLS LEFT TO RECOVER: 5799

7 AM FLBK REPORT: CP 2700#, TP 1800#, 20/64"

6

US **ROCKIES REGION Operation Summary Report** Spud Conductor: 5/29/2009 Spud Date: 5/30/2009 Site: NBU 922-18E PAD Rig Name No: End Date: 12/22/2009 Start Date: 12/4/2009 UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0 Active Datum: RKB @4,920.00ft (above Mean Sea

~CIIVE	L
l evel)	

Well: NBU 922-18D3BS RED

Project: UTAH-UINTAH

Event: COMPLETION

_evel)							
Date	Time Start-End	Duration Phase (hr)	Code	Sub Code	P/U	MD From (ft)	Operation
12/28/2009	7:00 -		33	A		(7 AM FLBK REPORT: CP 2500#, TP 1700#, 20/64" CK, 18 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED:5791 BBLS LEFT TO RECOVER: 5331

12/29/2009 1:44:07PM

m 3160-4 ugust 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

	WELL	COMPL	ETION C	OR RE	COI	MPLI	ETIC	ON RE	EPOF	RT	AND L	.OG				ease Serial TU0359	No.	
la. Type o	f Well f Completion	Oil Well		Well □ Wo	I D	•	_	Other eepen		Dlaso	. Do als	☐ Dif	· Dogwa	- 1	6. If	Indian, A	lottee	or Tribe Name
b. Type o	i Completion	_	r	_			υ _υ	еереп	٠.	riug	g Back	נות 🗖	. Kesvi			nit or CA TU63047		nent Name and No.
2. Name of KERR-	Operator MCGEE OI	L&GAS O	NSHORE	∐Mail: a				NDY LY								ase Name BU 922-		
3. Address	P.O. BOX DENVER		17								o. (include 9-6100	area co	de)	!	9. Al	PI Well N	0.	43-047-40592
4. Location	of Well (Re			nd in acc	ordan	ce wit	h Fed								10. F	ield and F	ool, or	r Exploratory
At surfa	ice SWNV	V 1881FN	IL 370FWL	40.038	12 N	Lat, 1	09.4	8872 W	/ Lon					ŀ		ATURAL		r Block and Survey
At top p	orod interval	reported be	elow NW	NW 864	4FNL	263F\	WL								01	r Area Se	ec 18	T9S R22E Mer
At total	depth NW	/NW 89	NL 272FW	/L	D	es	H	sm.	re.	νi	تعنقا)				County or INTAH	Parish	13. State UT
14. Date Sp 05/29/2	oudded 2009			ate T.D. //24/200	Reac				16. D	Date	Complete		Prod.		17. E		(DF, K 894 GL	KB, RT, GL)*
18. Total D	epth:	MD TVD	10129 9994	5	19.	Plug B	ack T	.D.:	MD TVI		100 993	065 3 4 5	20.	Deptl	h Brio	ige Plug S	et:	MD TVD
21. Type E	lectric & Oth	er Mechan	nical Logs R	un (Sub	mit co	py of	each)		•			22. W				⊠ No	O Ye	es (Submit analysis)
													s DST ectiona		ey?	No No		es (Submit analysis) es (Submit analysis)
23. Casing a	nd Liner Rec	ord (Repor	rt all strings					Ta:	~				- 		7			
Hole Size	Size/G	rade	Wt. (#/ft.)	To (MI		Bott (M		Stage D	Cemer epth	ıter		f Sks. & f Cemer	1 ~~	urry V (BBL		Cement	Top*	Amount Pulled
20.000		STEEL	36.7				40	-					28					
12.250	<u> </u>	525 J-55	36.0				2822	7					20		_			
7.875	4.	500 I-80	11.6	<u> </u>			0109	' 		\dashv		18	65					
					\dashv					┪								
24. Tubing	_																	
Size 2.375	Depth Set (M	(ID) Pa 9527	cker Depth	(MD)	Siz	e .	Dept	h Set (N	AD)	Pa	acker Dep	th (MD	Si	ze	De	pth Set (M	ID)	Packer Depth (MD)
25. Produci		3027	 				26	Perfora	ition R	eco	rd							
Fo	ormation		Тор		Bot	tom		P	erforat	ted I	Interval		Si	ze	N	lo. Holes		Perf. Status
A)	MESAVE	RDE		8010		10052	2				8010 TO	10052		0.360		289	OPE	N
	SMVD						ـ								↓_		-	· · · · · · · · · · · · · · · · · · ·
C)						···	+								+-		+	· · · · · · · · · · · · · · · · · · ·
D) 27. Acid. Fr	acture, Treat	ment. Cem	ent Squeeze	e. Etc.			ــــــــــــــــــــــــــــــــــــــ								ل		Щ.	
	Depth Interva		1	·						An	nount and	Type o	Materi	al		•		
	801	0 TO 100	52 PMP 10	,812 BB	LS SL	ICK H2	0 & 4	14,462 I	LBS 30									· · · · · · · · · · · · · · · · · · ·
·																		
·····	·																	
20 Producti	ion - Interval	Δ																
Date First	Test	Hours	Test	Oil	Id		,	Water	loi	il Gra	vity	Gas	-	Pr	oductio	on Method		
Produced 12/24/2009	Date 12/31/2009	Tested 24	Production	BBL 0.0		4CF 2200.	1	360.0	Co	orr. A		Gra					We ED	OM WELL
12/24/2009 Choke	Tbg. Press.	Csg.	24 Hr.	Oil	-	as	\rightarrow	Water	_	as:Oi	1	We	1 Status			rLU	vvo rk	OM WELL
Size 20/64	Flwg. 1700 SI		Rate	BBL 0		4CF 2200	1	360		atio			PGW					
	tion - Interva	<u> </u>	1						!							·		<u> </u>
Date First Produced	Test Date	Hours Tested	Test Production	Oil		as		Water		il Gra		Gas		Pr	oductio	on Method		
Liouuccu	Date	1 ested	Production	BBL	l ^M	ICF	[]	BBL	Co	orr. A	rt I	Gra	vity					
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Ć	ias	1	Water	Ga	as:Oi	1	We	l Status					

SI

RECEIVED

													
	uction - Inter						1		T		In the section		
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API		Gas Gravity		Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio		Well State	18			
28c. Produ	uction - Inter	val D			<u> </u>	<u> </u>			1	-			
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API		Gas Gravity	-	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio		Well State	118			
	sition of Gas	(Sold, used	l for fuel, ven	ed, etc.)	I				·I				
SOLE	nary of Porous	s Zones (Ir	nclude Aquife	ers):					T 3	31. Fo:	rmation (Log) Mai	kers	
Show tests,	all important including dep coveries.	zones of n	orosity and c	ontents there	e of: Cored i	ntervals and flowing an	d all drill-ster d shut-in pre	m essures					
	Formation		Тор	Bottom		Descripti	ions, Content	ts, etc.			Name	<u></u> .	Top Meas. Depth
GREEN F MAHOGA WASATC MESAVEI	NY H	s (include I THIS WEI	1828 2486 5276 8080	7960 10057 edure): TION REP		IE FINAL [DIRECTION		/EY.				
						**							
1. El- 5. Su	e enclosed att ectrical/Mech andry Notice	nanical Log for pluggin	ng and cement	verification		2. Geologi 6. Core Ar	nalysis		7 O			4. Directio	
34. I here	eby certify tha	at the foreg		tronic Subn	nission #80	486 Verifie	orrect as dete ed by the BL ONSHORE	M Well I	nformati	ion Sy	e records (see atta ystem. l	cnea instructio	ons):
Name	e (please prini 1	t) ANDY L	_YTLE		···-		Т	itle <u>REG</u>	ULATOF	1A YS	NALYST		
Signa	ature	(Electro	nic Submiss	sion)		<u></u> .	D	Date <u>01/22</u>	2/2010			· · · · · · · · · · · · · · · · · · ·	
Title 18 I	U.S.C. Section	n 1001 and	l Title 43 U.S	.C. Section	1212, make	it a crime fo	or any person	n knowing	ly and w	illfull	y to make to any d	epartment or a	agency

of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.



ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27) NBU 922-18E PAD NBU 922-18D3BS

NBU 922-18D3BS

Survey: FINAL

Standard Survey Report

27 July, 2009



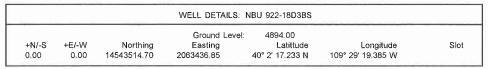




NBU 922-18D3BS UINTAH COUNTY, UTAH (nad 27) SECTION 18 T9S R22E SECTION 18 T9S R22E 1881'FNL 370'FWL(SL)

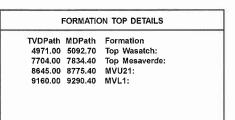
LAT: 40° 2' 17.233 N LONG: 109° 29' 19.385 W **RIG: HP 298**





SECTION DETAILS													
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target				
2775.00	5.05	352.52	2764.22	228.23	-30.29	0.00	0,00	230.19	-				
2930.00	5.05	352.52	2918.62	241.76	-32.07	0.00	0.00	243.84					
3428.48	20.00	353.90	3403.86	348.90	-44.05	3.00	1.84	351.64					
4847.28	20.00	353.90	4737.07	831.47	-95.57	0.00	0.00	836.94					
5847.40	0.00	0.00	5717.00	1003.30	-113.92	2.00	180,00	1009.75					
10100.40	0.00	0.00	9970.00	1003.30	-113.92	0.00	0,00	1009.75	PBHL_NBU 922-18D3BS				

	CASING DE	TAILS	
TVD	MD	Name	Size
2749.28	2760.00	9 5/8"	9.62



KB ELEV: WELL @ 4920,00ft (Original Well Elev) GRD ELEV: 4894.00 800 1600 9 5/8 3200 4000 4800 5600

1500 1250 FINAL MSS SVY 1000 LAST MWD SVY South(-)/North(+) (500 ft/in) SECTION LINE 250 500 1000 1250 1500 West(-)/East(+) (500 ft/in)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

TVD

9970.00

3600

6400 Name PBHL 7200 8000 LAST MWD SVY 8800 8958 FINAL MSS SVY 9600 9957 10400 2700

900

...

1800

-900

+N/-S +E/-W Northing Latitude Longitude Shape Easting 1003.30 -113.92 14544515.92 2063305.91 40° 2' 27.150 N109° 29' 20.850 W Circle (Radius: 25.00)

Survey: Survey #1 (NBU 922-18D3BS/NBU 922-18D3BS)

Created By: Robert H. Scott



Weatherford International Ltd.

Survey Report



Company: Project:

Site:

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)

NBU 922-18E PAD

Well: Wellbore: NBU 922-18D3BS NBU 922-18D3BS

NBU 922-18D3BS

Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 922-18D3BS

WELL @ 4920.00ft (Original Well Elev) WELL @ 4920.00ft (Original Well Elev)

Minimum Curvature

Mean Sea Level

EDM 2003.21 Single User Db

Project

UINTAH COUNTY, UTAH (nad 27),

Map System:

Universal Transverse Mercator (US Survey Fee System Datum:

NAD 1927 - Western US

Geo Datum: Map Zone:

Zone 12N (114 W to 108 W)

Site

From:

NBU 922-18E PAD, SECTION 18 T9S R22E

Site Position:

Lat/Long

Northing: Easting:

14,543,514.70ft

2,063,436.85ft

Longitude:

40° 2' 17.233 N

Position Uncertainty:

Slot Radius:

Latitude: **Grid Convergence:**

109° 29' 19.385 W

0.97°

Well

NBU 922-18D3BS

Well Position

+N/-S

+E/-W 0.00 ft

0.00 ft Northing: Easting:

14,543,514.70 ft

2,063,436.85 ft

Latitude: Longitude:

40° 2' 17.233 N 109° 29' 19.385 W

Position Uncertainty

0.00 ft

0.00 ft

Wellhead Elevation:

ft

Ground Level:

4,894.00 ft

Wellbore

NBU 922-18D3BS

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

BGGM2008

7/8/2009

11.35

65.98

52,560

Design

NBU 922-18D3BS

Audit Notes:

Version:

1.0

100.00

Phase:

(ft)

0.00

ACTUAL

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD)

+N/-S (ft) 0.00

+E/-W (ft) 0.00

Direction (°)

353.70

Date 7/27/2009

10,088.00 Survey #1 (NBU 922-18D3BS)

Survey Program From (ft)

То

(ft)

Survey (Wellbore)

Tool Name

MWD

Description MWD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.82	250.92	100.00	-0.23	-0.68	-0.16	0.82	0.82	0.00	
195.00	1.06	298.87	194.99	-0.03	-2.09	0.20	0.84	0.25	50,47	
285.00	2.22	344.07	284.95	2.05	-3.30	2.40	1.84	1.29	50.22	
376.00	3.51	351.81	375.83	6.50	-4.18	6.92	1.48	1.42	8.51	
471.00	4.75	357.87	470.59	13.31	-4.74	13.75	1.38	1.31	6.38	
564.00	5.31	357.00	563.23	21.45	-5.11	21.88	0.61	0.60	-0.94	
658.00	6.00	355.75	656.77	30.70	-5.70	31.14	0.75	0.73	-1.33	
753.00	6.19	359.37	751.23	40.77	-6.12	41.19	0.45	0.20	3.81	
846.00	5.94	358.37	843.71	50.59	-6.31	50.98	0.29	-0.27	-1.08	
939.00	6.81	359.87	936.14	60.92	-6.46	61.26	0.95	0.94	1.61	
1,030.00	6.56	354.50	1,026.52	71.49	-6.97	71.82	0.74	-0.27	-5.90	
1.121.00	5.88	350.25	1.116.98	81.26	-8.26	81.67	0.90	-0.75	-4 .67	



Weatherford International Ltd.

Survey Report



Company:

ANADARKO PETROLEUM CORP.

Project:

UINTAH COUNTY, UTAH (nad 27)

Site: Well: NBU 922-18E PAD NBU 922-18D3BS

Wellbore:

NBU 922-18D3BS

Design:

NBU 922-18D3BS

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 922-18D3BS

WELL @ 4920.00ft (Original Well Elev)

WELL @ 4920.00ft (Original Well Elev)

True

Minimum Curvature

EDM 2003.21 Single User Db

Survey

Magazirad			Vertical			Vertical	Dogleg	Build	Turn
Measured Depth	Inclination	Azimuth	vertical Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
1.214.00	6.00	348.75	1,209.48	90.72	-10.02	91.27	0.21	0.13	-1.61
1,307.00	5.56	351.62	1,302.01	99.94	-11.62	100.61	0.57	-0.47	3.09
1,399.00	5.00	2.05	1,393.62	108.36	-12.13	109.03	1.21	-0.61	11.34
1,492.00	5.00	0.37	1,486.27	116.46	-11.96	117.07	0.16	0.00	-1.81
1,585.00	4.69	352.37 351.87	1,578.94	124.28 132.26	-12.43 -13.54	124.90 132.95	0.80 0.60	-0.33 0.60	-8.60 -0.54
1,678.00 1,772.00	5.25 5.69	347.12	1,671.59 1,765.16	141.06	-15.19	141.88	0.67	0.60	-5.05
1.864.00	5.81	345.62	1,856.70	150.02	-17.36	151.02	0.21	0.13	-1.63
1,958.00	5.38	351.87	1,950.25	158.99	-19.17	160.13	0.79	-0.46	6.65
2,051.00	5.13	351.00	2,042.86	167.41	-20.43	168.64	0.28	-0.27	- 0.94
2,144.00	5.47	349.31	2,135.46	175.88	-21.91	177.22	0.40	0.37	-1.82
2,238.00	4.69	352.25	2,229.09	184.09	-23.25	185.53	0.87	-0.83	3.13
2,329.00	4.94	353.12	2,319.77	191.66	-24.23	193.16	0.29	0.27	0.96
2,423.00	4.88	344.62	2,413.43	199.54	-25.77	201.16	0.78	-0.06	-9.04 5.14
2,518.00	4.63	349.50	2,508.10	207.20	-27.54	208.97	0.50	-0.26	5.14 5.10
2,611.00 2,705.00	4.66 4.75	354.33 352.25	2,600.79 2,694.48	214.65 222.31	-28.60 -29.50	216.49 224.20	0.42 0.21	0.03 0.10	5.19 -2.21
2,775.00	5.05	352.52	2,764.22	228.23	-30.29	230.18	0.43	0.43	0.39
2,841.00	5.20	340.44	2,829.96	233.93	-31.67	236.00	1.65	0.23	-18.30
2,935.00	6.24	331.69	2,923.49	242.44	-35.52	244.88	1.44	1.11	-9.31
3,029.00	8.03	332.67	3,016.76	252.78	-40.96	255.74	1.91	1.90	1.04
3,124.00	11.31	336.35	3,110.40	267.21	-47.74	270.83	3.51	3.45	3.87
3,218.00	13.31	350.60	3,202.25	286.33	-53.21	290.44	3.85	2.13	15.16
3,312.00	14.94	353.85	3,293.41	309.06	-56.28	313.37	1.93	1.73	3.46
3,406.00	17.63	353.23	3,383.63	335.24	-59.25	339.72	2.87	2.86	-0.66
3,501.00 3,596.00	20.31 20.88	352.35 354.85	3,473.46 3,562.39	365.88 399.08	-63.14 -66.86	370.60 404.01	2.84 1.10	2.82 0.60	-0.93 2.63
3,691.00	22.37	354.36	3,650.70	433.93	-70.16	439.01	1.58	1.57	-0.52
3,786.00	22.37	350.73	3,738.66	433.93 469.53	-70.16 -74.81	474.91	1.48	-0.33	-3.82
3,880.00	21.00	352.60	3,826.10	503.66	-79.82	509.38	1.34	-1.13	1.99
3,975.00	20.94	355.60	3,914.81	537.47	-83.31	543.36	1.13	-0.06	3.16
4,069.00	21.31	354.10	4,002.49	571.20	-86.36	577.23	0.70	0.39	-1.60
4,164.00	21.19	355.98	4,091.03	605.50	-89.34	611.65	0.73	-0.13	1.98
4,259.00	19.81	352.98	4,180.02	638.61	-92.51	644.90	1.83	-1.45	-3.16
4,354.00	19.19	353.85	4,269.57	670.11	-96.15	676.61	0.72	-0.65	0.92
4,449.00	17.37	356.49	4,359.77	699.79	-98.69	706.39	2.10	-1.92	2.78
4,544.00	16.44	353.10	4,450.67	727.29	-101.17	734.00	1.43	-0.98	-3.57
4,639.00	18.50	350.85	4,541.28	755.52	-105.18	762.50	2.28	2.17	-2.37
4,734.00	15.63	352.10	4,632.09	783.08	-109.34	790.35	3.05	-3.02	1.32
4,829.00	15.81	353.85	4,723.54	808.63	-112.49	816.09	0.53	0.19	1.84
4,923.00 5,017.00	16.56 15.63	0.10 355.98	4,813.82 4,904.14	834.76 860.78	-113.84 -114.70	842.21 868.17	2.02 1.57	0.80 -0.99	6.65 -4.38
5,112.00	15.63	353.23	4,995.62	886.26	-117.11	893.76	0.78	0.00	-2.89
5,112.00	15.00	353.23	5,086.29	910.91	-120.03	918.58	0.73	-0.67	0.00
5,300.00	15.10	357.70	5,177.06	935.23	-121.96	942.96	1.24	0.11	4.76
5,395.00	12.81	356.85	5,269.25	958.11	-123.03	965.83	2.42	-2.41	-0.89
5,490.00	10.81	355.73	5,362.24	977.51	-124.28	985.25	2.12	-2.11	-1.18
5,584.00	8.50	4.76	5,454.91	993.23	-124.36	1,000.88	2.93	-2.46	9.61
5,679.00	5.69	7.10	5,549.17	1,004.90	-123.19	1,012.35	2.97	-2.96	2.46
5,774.00	3.94	25.10	5,643.84	1,012.53	-121.22	1,019.72	2.41	-1.84	18.95
5,869.00	2.31	58.10	5,738.70	1,016.50	-118.21	1,023.33	2.49	-1.72	34.74
5,964.00	1.63	89.48	5,833.64	1,017.52	-115.24	1,024.02	1.32	-0.72	33.03
-,			5,926.63	1,017.16	-114.23	1,023.55	2.23	-1.11	140.23



Weatherford International Ltd.

Survey Report



Company:

ANADARKO PETROLEUM CORP.

Project: Site: UINTAH COUNTY, UTAH (nad 27)

Well: Wellbore: NBU 922-18E PAD NBU 922-18D3BS NBU 922-18D3BS

Design:

NBU 922-18D3BS

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 922-18D3BS

WELL @ 4920.00ft (Original Well Elev) WELL @ 4920.00ft (Original Well Elev)

True

Minimum Curvature

EDM 2003.21 Single User Db

e	
SHI	vev
	,

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
6,247.00	1.25	268.48	6,116.61	1,015.20	-116.16	1,021.81	1.34	0.26	71.72	
6,342.00	0.75	319.48	6,211.60	1,015.64	-117.60	1,022.41	1.02	-0.53	53.68	
6,437.00	1.63	10.98	6,306.58	1,017.44	-117.74	1,024.22	1.37	0.93	54.21	
6,532.00	1.56	13.10	6,401.54	1,020.03	-117.19	1,026.73	0.10	-0.07	2.23	
6,627.00	1.19	21.60	6,496.51	1,022.21	-116.54	1,028.82	0.44	-0.39	8.95	
6,721.00	0.94	36.60	6,590.50	1,023.73	-115.72	1,030.25	0.40	-0.27	15.96	
6,816.00	0.81	52.98	6,685.49	1,024.76	-114.72	1,031.16	0.30	-0.14	17.24	
6,911.00	0.88	69.48	6,780.48	1,025.42	-113.50	1,031.68	0.27	0.07	17.37	
7,006.00	0.86	80.84	6,875.47	1,025.79	-112.11	1,031.90	0.18	-0.02	11.96	
7,101.00	0.75	103.22	6,970.46	1,025.76	-110.80	1,031.73	0.35	-0.12	23.56	
7,196.00	1.00	117.23	7,065.44	1,025.24	-109.46	1,031.06	0.34	0.26	14.75	
7,291.00	1.06	131.73	7,160.43	1,024.28	-108.07	1,029.95	0.28	0.06	15.26	
7,385.00	1.19	141.10	7,254.41	1,022.94	-106.80	1,028.48	0.24	0.14	9.97	
7,480.00	1.25	132.35	7,349.39	1,021.47	-105.42	1,026.87	0.21	0.06	-9.21	
7,575.00	1.56	129.98	7,444.36	1,019.94	-103.66	1,025.16	0.33	0.33	-2.49	
7,669.00	0.81	145.85	7,538.34	1,018.57	-102.31	1,023.65	0.86	-0.80	16.88	
7,764.00	1.06	272.35	7,633.33	1,018.05	-102.81	1,023.19	1.76	0.26	133.16	
7,858.00	1.00	271.58	7,727.32	1,018.11	-104.50	1,023.43	0.07	-0.06	-0.82	
7,953.00	1.00	252.60	7,822.31	1,017.89	-106.12	1,023.38	0.35	0.00	-19.98	
8,048.00	0.95	223.82	7,917.29	• 1,017.07	-107.46	1,022.72	0.51	-0.05	-30.29	
8,142.00	1.13	217.60	8,011.28	1,015.77	-108.56	1,021.55	0.23	0.19	-6.62	
8,235.00	1.50	211.60	8,104.25	1,014.01	-109.76	1,019.93	0.42	0.40	-6.45	
8,330.00	1.38	208.22	8,199.22	1,011.94	-110.95	1,018.01	0.15	-0.13	-3.56	
8,425.00	0.63	232.10	8,294.21	1,010.61	-111.90	1,016.79	0.89	-0.79	25.14	
8,519.00	0.63	188.98	8,388.20	1,009.79	-112.39	1,016.02	0.49	0.00	-45.87	
8,614.00	0.69	165.73	8,483.20	1,008.72	-112.33	1,014.95	0.29	0.06	-24.47	
8,709.00	0.94	145.48	8,578.19	1,007.52	-111.75	1,013.70	0.40	0.26	-21.32	
8,804.00	1.19	152.10	8,673.17	1,006.00	-110.85	1,012.09	0.29	0.26	6.97	
8,899.00 8,994.00 LAST MW I	1.25 1.25 D SVY	159.60 180.73	8,768.15 8,863.13	1,004.16 1,002.15	-110.02 -109.68	1,010.17 1,008.14	0.18 0.48	0.06 0.00	7.89 22.24	
9,089.00 FINAL MS 10,088.00	1.31 S SVY 1.60	184.23 115.65	8,958.10 9,956.85	1,000.04 982.61	-109.77 -98.04	1,006.04 987.43	0.10 0.17	0.06	3.68 -6.86	

Casing	Points

Measured	Vertical				Casing	Hole	
Depth (ft)	Depth (ft)		Name		Diameter (in)	Diameter (in)	
2,760.00	2,749.28	9 5/8"			9.62	12.25	

Depth	Depth	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	Comment
9,089.00	8,958.10	1,000.04	-109.77	LAST MWD SVY
10 088 00	9 956 85	982.61	-98.04	FINAL MSS SVY

Charlend Du	A mmra. :	ad Duu	Data	
I Checked By:	vorgaA	ed Bv:	Date	
1		J		·
1				

SUNDR Do not use this form for propos	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING RY NOTICES AND REPORTS ON sals to drill new wells, significantly deepen exis gged wells, or to drill horizontal laterals. Use A	I WELLS ting wells below current	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0359 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE 7.UNIT OF CA AGREEMENT NAME: NATURAL BUTTES 8. WELL NAME and NUMBER: NBU 922-18D3BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI	HORE, L.P.		9. API NUMBER: 43047405920000
	treet, Suite 600, Denver, CO, 80217 3779	UMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1881 FNL 0370 FWL QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 18	P, RANGE, MERIDIAN: 3 Township: 09.0S Range: 22.0E Meridian: S		COUNTY: UINTAH STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
THE OPERATOR REQ WELL LOCATION. THE FORMATION. THE O THE NEWLY WASATCH	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF	OMPLETE THE SUBJECT DMPLETE THE WASATCH ATION TO COMMINGLE DE FORMATION. PLEAS PROCEDURE.	Accepted by the Utah Division of E Oil, Gas and Mining The: August 19, 2010
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 8/3/2010	



The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047405920000 Authorization: Board Cause No. 173-14.

> Appropried by the **Utah Division of** Oil, Gas and Mining

Greater Natural Buttes Unit



NBU 922-18D3BS

RE-COMPLETIONS PROCEDURE

DATE:7/23/2010 AFE#:2047237

COMPLETIONS ENGINEER: Conner Staley, Denver, CO

(720)-929-6419 (Office)

SIGNATURE:

ENGINEERING MANAGER: JEFF DUFRESNE

SIGNATURE:

REMEMBER SAFETY FIRST!

Name: NBU 922-18D3BS

Location: NW SW NW NW Sec. 18 T9S R22E

Uintah County, UT

Date: 7/23/10

ELEVATIONS: 4920 GL 4946 KB

TOTAL DEPTH: 10125 **PBTD:** 10065

SURFACE CASING: 9 5/8", 36# J-55 ST&C @ 2822' **PRODUCTION CASING:** 4 1/2", 11.6#, I-80 LT&C @ 10109'

Marker Joint 4778-4792'

TUBULAR PROPERTIES:

	BURST	COLLAPSE	DRIFT DIA.	CAPACITIES	
	(psi)	(psi)	(in.)	(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55	7,700	8,100	1.901"	0.00387	0.1624
tbg					
4 ½" 11.6# I-80	7780	6350	3.875"	0.0155	0.6528
(See above)					
2 3/8" by 4 ½"				0.0101	0.4227
Annulus					

TOPS:

1828' Green River

2123' Birds Nest

2486' Mahogany

5106' Wasatch

7839' Mesaverde

10125' Bottom of Mesaverde (TD)

CBL indicates good cement below 800'

GENERAL:

- A minimum of **19** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 7/25/09
- 6 fracturing stages required for coverage.
- Procedure calls for 7 CBP's (8000 psi).
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gal/1000 during pad and sand ramp up to 1.25 ppg. Pump at 10 gal/1000 during flush.
- 30/50 mesh Ottawa sand, Slickwater frac.
- Maximum surface pressure 7000 psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.

- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing over flush stage by 5 bbls (from top perf)
- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump a **curable resin coated sand (such as SLC)** last 5,000# of all frac stages
- Tubing Currently Landed @~9527
- Originally completed on 12/2/09

Existing Perforations:

_	Pe	rfs		
	Top,	Bot.,		
Zone	ft.	ft	SPF	Holes
1				
MESAVERDE	8010	8012	3	6
MESAVERDE	8088	8092	3	12
MESAVERDE	8120	8122	3	6
MESAVERDE	8150	8152	4	8
MESAVERDE	8232	8234	4	8
MESAVERDE	8340	8344	3	12
MESAVERDE	8402	8404	3	6
MESAVERDE	8450	8454	4	16
MESAVERDE	8514	8516	4	8
MESAVERDE	8626	8630	3	12
MESAVERDE	8640	8642	3	6
MESAVERDE	8798	8800	4	8
MESAVERDE	8860	8865	3	15
MESAVERDE	8930	8932	3	6
MESAVERDE	8980	8984	3	12
MESAVERDE	9080	9082	4	8
MESAVERDE	9112	9116	4	16
MESAVERDE	9244	9246	4	8
MESAVERDE	9280	9284	3	12
MESAVERDE	9348	9352	3	12
MESAVERDE	9412	9414	4	8
MESAVERDE	9570	9574	3	12
MESAVERDE	9592	9596	4	16
MESAVERDE	9622	9626	4	16
MESAVERDE	9792	9794	3	6
MESAVERDE	9830	9832	3	6
MESAVERDE	9961	9963	4	8
MESAVERDE	9994	9998	3	12
MESAVERDE	10050	10052	4	8

PROCEDURE:

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
- 2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~9527'). Visually inspect for scale and consider replacing if needed.
- 3. If tbg looks ok consider running a gauge ring to 8010 (50' below proposed CBP). Otherwise P/U a mill and C/O to 8010 (50' below proposed CBP).
- 4. Set 8000 psi CBP at ~ 7960'. Pressure test BOP and casing to 6000 psi. .
- 5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

Zone From To spf # of shots WASATCH 7786 7792 3 18 WASATCH 7924 7930 4 24

- 6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gal of 15% HCl and let soak. Fracture as outlined in Stage 1 on attached listing. Underdisplace to ~7786' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 7. Set 8000 psi CBP at ~7470'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone From To spf # of shots WASATCH 7424 7428 4 16 WASATCH 7436 7440 4 16

- 8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7424' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 9. Set 8000 psi CBP at ~7154'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 7118 7124 4 24

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~7118' trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 11. Set 8000 psi CBP at ~6516'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 6440 6444 3 12 WASATCH 6480 6486 4 24

- 12. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6440' trickle 250gal 15%HCL w/ scale inhibitor in flush.
- 13. Set 8000 psi CBP at ~6278'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 6242 6248 4 24

- 14. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6242' trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 15. Set 8000 psi CBP at ~6038'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 6002 6008 4 24

- 16. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6002' flush only with recycled water.
- 17. Set 8000 psi CBP at~5952'.
- 18. TIH with 3 7/8" mill, pump off sub, SN and tubing.
- 19. Mill ALL plugs and clean out to PBTD at 10065. Land tubing at \pm 9527' pump off bit and bit sub. This well WILL be commingled at this time.
- 20. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.
- 21. RDMO

For design questions, please call Conner Staley, Denver, CO (720)-929-6419 (Office)

For field implementation questions, please call Jeff Samuels Vernal, UT 435-781-9770 (Office)

NOTES:

Stage		Perfor						
	Zones	Top, ft	Bottom, ft	SPF	Holes	F	racture Cover	age
- 4								
1	WASATCH	7786	7792	3				779
	WASATCH	7924	7930	4	24	79	11 to	793
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				42	CBP DEPTH	1 7,470	
	_							•
2	WASATCH	7424	7428	4	16	74	18 to	7430.
_	WASATCH	7436	7440	4				744
	WASATCH						-	
	WASATCH						+	
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				32	CBP DEPTH	7,154	
	-							
3	WASATCH	7118	7124	4	24	7109	9.5 to	712
	WASATCH					1 100	1 -	· · · · · ·
	WASATCH	+						
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				24	CBP DEPTH	6,516	
								•
4	WASATCH	6440	6444	3	12	64	37 to	646
•	WASATCH	6480	6486	4				649
	WASATCH	0400	0400			0401	.5 10	043
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				36	CBP DEPTH	6,278	
5	WASATCH	6242	6248	4	24	62	20 to	6262.
	WASATCH	0242	0240		27	02	20 10	0202.
	$\overline{}$							
	WASATCH							-
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				24	CBP DEPTH	6,038	
6	WASATCH	6002	6008	4	24	59	94 to	601
	WASATCH	0002	0000				34 10	
							+	
	WASATCH							-
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	$\overline{}$							
	IMASAIUH I				l	 		
	WASATCH		l l		II OOK		I	1
					Look 24	COD DEDTL	5 052	
	# of Perfs/stage				L00K 24	CBP DEPTH	1 5,952	
						CBP DEPTH	5,952	

water F	922-18D3BS Frac	Cop	y to new I	oook]		Recomplete? Pad? ACTS?	Y			Production Log DFIT		Enter Numb	nning a Prod er of DFITs						
	Zona	Per		ope	Uala-	Rate	Fluid	Initial		Fluid	Volume	Cum Vol	Volume	Cum Vol BBLs	Fluid % of	Sand	Sand		Footage from	So
		Top, ft.	BOL, ft	SPF			Туре	ppg	ppg		gals	gals			frac	% of frac	lbs	lbs	CBP to Flush	g
1 WASA		7786 7924	7792 7930	3	18 24		Pump-in test ISIP and 5 min ISIP			Slickwater		0	0	0						4
WASA		7324	7930	"	24		Slickwater Pad			Slickwater	12,560	12,560	299	299	15.0%	0.0%		0		3
WASA							Slickwater Ramp	0.25	1.5	Slickwater	41,866	54,426	997	1,296		35.7%		36,633		12
WASA							Slickwater Ramp	1.5	3	Slickwater	29,306	83,733	698	1,994		64.3%	65,939	102,572		(
WASA						50	Flush (4-1/2)			Slickwater	5,083	88,815	121	2,115				102,572		
WAS/							ISDP and 5 min ISDF	1		Slickwater										
WASA																		102,572		ì
WASA												88,815	121	2,115						4
WASA	ATCH																			26
			# of Perf	s/stage	Look 42								F	lush depth	7786	gal/md-ft	25,000 CBP depth		lbs sand/md-ft 316	
2 WASA	ATCH	7424	7428	4	16	42.3 Varied	<< Above pump time Pump-in test	(min)		Slickwater		0	0	0						
WASA		7436	7440	4	16	0	ISIP and 5 min ISIP						'	-						
WASA						50	Slickwater Pad	l		Slickwater	5,618	5,618		134	15.0%					- 1
WASA							Slickwater Ramp	0.25	1.5	Slickwater	18,725	24,343	446	580						5
WASA							Slickwater Ramp Flush (4-1/2)	1.5	°	Slickwater Slickwater	13,108 4,846	37,450 42,296	312 115	892 1,007	35.0%	64.3%	29,492	45,876 45,876		0
WASA							ISDP and 5 min ISDF			Slickwater	1,010	,		1,000				,		Ò
WASA																				9
WAS/												42,296	115	1,007				45,876		4
WASA												42,200	'''	1,001						12
					Look								_		L		100,000		lbs sand/md-fi	
			# of Perf	s/stage	32		cc About numer time	(min)					F	lush depth	7424	· '	CBP depth	7,154	270	
3 WASA	ATCH	7118	7124	4	24	Varied	<< Above pump time Pump in test	(min)		Slickwater		0	0	0						
WASA					-	0	ISIP and 5 min ISIP													
WASA							Slickwater Pad			Slickwater	4,224	4,224	101	101	15.0%					13
WAS/							Slickwater Ramp Slickwater Ramp	0.25	1.5	Slickwater Slickwater	14,080 9,856	18,304 28,160		436 670				12,320		4:
WASA						50	Flush (4-1/2)	1.0	"	Slickwater	4,647	32,807	111	781	35.0%	04.376	22,170	34,496		ő
WASA							ISDP and 5 min ISDF			Slickwater										0
WASA																				0
WAS/												32,807	111	781				34,496		- 0 -42
WASA												52,007		101						9
					Look								_			gal/md-ft	40,000	49,000	lbs sand/md-fi	
			# of Perf	s/stage	24	150		Color					F	lush depth	7118	_ '	CBP depth	6,516	602	
4 WASA	ATCH	6440	6444	3	12	Varied	<< Above pump time Pump-in test	(min)		Slickwater		0	0	0						
WASA		6480	6486	4	24		ISIP and 5 min ISIP						"							
WASA							Slickwater Pad	l		Slickwater	11,359	11,359		270		0.0%				34
WASA						50	Stickwater Ramp	0.25	1.5	Slickwater	37,863 26,504	49,222 75,726	902	1,172 1,803			33,130			11
WAS/							Slickwater Ramp Flush (4-1/2)	1.5	3	Slickwater Slickwater	4,204	79,930	631 100	1,803		64.3%	59,634	92,764 92,764		0
WASA						-	ISDP and 5 min ISDF			Slickwater	7,207	10,000		1,000				02,101		ŏ
WASA	ATCH																			0
WASA												70.020	400	1.003				92,764		0
WASA												79,930	100	1,903						18
			# of Perf	o fortame	36									lush depth	6440	gal/md-ft	70,000 CBP depth		lbs sand/md-ft 162	
				a stage			<< Above pump time	(min)							0440		depail	0,270	102	
5 WASA		6242	6248	4	24		Pump-in test ISIP and 5 min ISIP			Slickwater		0	0	0						
WASA						50	Slickwater Pad			Slickwater	6,980	6,980	166	166	15.0%	0.0%	. 0	0		2
WASA	ATCH					50	Slickwater Ramp	0.25	1.5	Slickwater	23,265	30,245	554	720	50.0%	35.7%	20,357			70
WASA							Slickwater Ramp	1.5	3	Slickwater	16,286	46,530	388	1,108		64.3%	36,642			0
WASA						50	Flush (4-1/2) ISDP and 5 min ISDF			Slickwater Slickwater	4,075	50,605	97	1,205				56,999		٥
WASA																				ŏ
WASA												FA.00-		100-				56,999		0
WAS/												50,605	97	1,205	1					35
- 17 727					Look											gal/md-ft			lbs sand/md-fr	
			# of Perf	s/stage	24	24.1	<< Above pump time	(min)					F	lush depth	6242		CBP depth	6,038	204	
6 WASA		6002	6008	4	24	Varied	Pump-in test	(-mi)		Slickwater		0	0	0						
WASA							ISIP and 5 min ISIP			CE-I	0.757	0.757	404	404	45.00					_~
WAS/							Slickwater Pad Slickwater Ramp	0.25	1.5	Slickwater Slickwater	6,757 22,523	6,757 29,279	161 536	161 697						21 61
WASA	ATCH						Slickwater Ramp	1.5	3	Slickwater	15,766	45,045	375					55,180		0
WASA	ATCH						Flush (4-1/2)			Slickwater	3,918	48,963						55,180		0
WASA							ISDP and 5 min ISDF	1		Slickwater										0
WAS/																		55,180		0
WASA	ATCH											48,963	93	1,166						Ó
WASA	ATCH				Look											gal/md-ft	50,000	61.250	lbs sand/md-ft	- 81
			# of Perf	s/stage	24	20.0							F	lush depth	6002		CBP depth		50	
Tota	ils				182	23.3					Total Fluid	343,416	gais	8,177	bbis		 Total Sand	387,888		
						1	1	1	1	1	1	8,177	Line .						1	

Sundry Number: 16921 API Well Number: 43047405920000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU0359
SUND	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen e ıgged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18D3BS
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047405920000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHON treet, Suite 600, Denver, CO, 80217 3779	E NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1881 FNL 0370 FWL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 18	IP, RANGE, MERIDIAN: 3 Township: 09.0S Range: 22.0E Meridian: S	5	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	☐ ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN [FRACTURE TREAT	☐ NEW CONSTRUCTION
7/25/2011	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
DRILLING REPORT	☐ TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
Report Date:	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	OTHER	OTHER:
THE OPERATOR HAWELL. THE OPERATOON OPERATOR HAS COMITH THE EXISTIN PLACED ON	MPLETED OPERATIONS. Clearly show all pertions AS PERFORMED THE RECOMPLE OR HAS RECOMPLETED THE WA MMINGLED THE NEWLY WASAT NG MESAVERDE FORMATION. T PRODUCTION ON 07/25/2011 / WELL HISTORY WILL BE SUBM COMPLETION REPORT.	TION ON THE SUBJECT SATCH FORMATION. THE CH FORMATION, ALONG HE SUBJECT WELL WAS LAT 11:15 AM. THE OIL	accepted by the Utah Division of Gas and Mining
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 7/25/2011	
l		., 23, 2011	

Form 3160-4 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

WELL	COMPLETION	OR RECOMPLETION	REPORT AND LOG

Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Well Status		WELL	COMPL	ETION C	OR RECC	MPLE	ION R	EPORT	AND	.OG			ease Serial I ITU0359	No.	
2. Name of Operation Contact AnDREW LYTLE S. Description S. Lease Name and No. UTUSSOF7A				_					a Dools	S Dies p		6. If	Indian, Allo	ottee or	Tribe Name
Address P.O. BOX 173779 Aldress P.O. BOX 173779 P.P. 720-929-94-100 P.P. 720	o. Type o	Completion	_		☐ WORK O	ver 🔲	Deepen	Ŭ Pit	kesvr.	7. U	nit or CA A TU63047	greeme	nt Name and No.		
DENVER, CO 80217 Phr. 720-929-9100	2. Name of KERR	Operator MCGREE C	IL & GAS	S ONSHO R	B∕Jail: andr	Contact: ew.lytle@	ANDRE anadark	W LYTLE							
At surface SWNW 1881FNL 370FWL 40,038120 N Lat, 109.488720 W Lon At top proxi interval reported below NWNW 864FNL 283FWL At total depth NWNW 89FNL 272FWL UT UT UT UT UT UT UT U	3. Address			217			3a. Ph	Phone No. 720-92	lo. (include 29-6100	area code))	9. A	PI Well No.		
At top prod interval reported below NWNW 864FNL 263FNL At topid depth NWNW 898FNL 272FWL 14. Date Spudded O772472009 15. Date T.D. Reached O772572011 18. Total Depth: MD 10125	4. Location	of Well (Re	port locati	on clearly an	d in accorda	nce with F	ederal rec	quirement	s)*						
At total depth NN/NW 896FNL 272FWL	At surfa	ice SWNV	V 1881FN	NL 370FWL	40.038120	N Lat, 10	9.48872	0 W Lon				11. 5	Sec., T., R.,	M., or)	Block and Survey
14. Date Spudded 15. Date Completed 16. Date Completed 17. Elevations (DF, KB, RT, GL)* 4594 GL 18. Total Depth: MD	At top p	orod interval i	reported b	elow NW	NW 864FN	L 263FWL		ς,							
18. Total Depth: MD			NW 899F				$\mathcal{O}_{\mathcal{N}}$								
TVD 9834						cnea		D D 8	ε Α 🐪 🔲		rod.	17. 1 			3, RT, GL)*
Was DST run; No Yes (Submit analysis)	18. Total D	epth:			5 19.	Plug Bac	k T.D.:				20. Dep	oth Bri	dge Plug Se		
Directional Survey? No	21. Type E GR/CB	lectric & Oth	er Mechai R/SDL/D	nical Logs R	un (Submit o	opy of eac	ch)					1?	No l	Yes	(Submit analysis)
Hole Size						···							□ No	¥ Yes	(Submit analysis)
20,000		<u> </u>			Тор	1	~		1				Cement 7	Fon*	Amount Pulled
12.250 9.625 J-55 36.0 2822 620 0 7.875 4.500 I-80 11.6 10109 1865 800 24. Tubing Record	20,000	14	000 STI		(MD)	 ` ` `		Depth	Type o			L)		- P	
24. Tubing Record Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Size S												··-		0	
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD)	7.875	4.	500 I-80	11.6		101	09			1865	5			800	
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD)		<u> </u>				 					ļ				
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD)		 				 									
Size Depth Set (MD) Packer Depth (MD) Size Depth Set (MD) Packer Depth (MD) Packer Depth (MD)	24. Tubing	Record			l	<u> </u>					<u> </u>				
2.375			(ID) P	acker Depth	(MD) S	ize D	epth Set (MD)	Packer De	oth (MD)	Size	De	pth Set (MI	D) 1	Packer Depth (MD)
Formation Top Bottom Perforated Interval Size No. Holes Perf. Status			7488												
A) WASATCH 6002 7929 6002 TO 7929 0.360 120 OPEN B)				· · · · · · · · · · · · · · · · · · ·	r									r	
B C C D D D D D D D D			ATCH					Perforated	************	0.7000				005)	
C) D) 27. Acid, Fracture, Treatment, Cement Squeeze, Etc. Depth Interval Amount and Type of Material		VVASA	ATCH.		6002	7929	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		6002 1	0 /929	0.3	60	120	OPEN	
Diagonal															
Depth Interval Amount and Type of Material									***************************************						······································
Choke Tig. Press. 222.0 Test BBL Corr. API Gravity Corr. API	27. Acid, Fi	racture, Treat	ment, Cer	nent Squeeze	e, Etc. '										
28. Production - Interval A Date First Produced O7/25/2011 Choke Size Fivy 124 Press. 26/64 Si Test Date Production - Interval B Date First Produced Date Production BBL MCF BBL Corr. API Gravity Corr. API Gravity Production Method DIV. OF OIL, GAS & MINING FLOWS FROM WELL Choke Size Fivy 124 Press. 222.0 46 1481 128 Press. Production - Interval B Date First Produced Date Rate BBL MCF BBL Ratio PGW Choke Tist Test Hours Test Oil Gas Water BBL Ratio PGW Choke Tist First Production - Interval B Choke Tist First Produced Date Rested Production BBL MCF BBL Gas Water Gas:Oil Gravity PGW Choke Tist Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Gravity Gravity Production Method Gravity Well Status Choke Tist Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Ratio Water Gas:Oil Ratio Water Gas:Oil Well Status Choke Tist Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Ratio Water Gas:Oil Ratio Well Status									mount and	Type of M	laterial				
28. Production - Interval A Date First Produced Date		60	102 TO 79	929 PUMP 4	903 BBLS S	LICK H2O	& 133,563	# SAND			·····				
28. Production - Interval A Date First Produced Date Date Date Production Date Production Div. OF OIL, GAS & MINING Produced Date Production Div. OF OIL, GAS & MINING Production Div. OF OIL, GAS Water BBL Ratio Production Div. OF OIL, GAS Water BBL OIL Gravity Gas Gravity Production Method Gravity Production Div. OF OIL GAS Water BBL Ratio Water Gas:Oil Ratio Production Well Status			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								····		- 13	ECI	EIVED
28. Production - Interval A Date First Produced Date Date Date Production Date Production Div. OF OIL, GAS & MINING Produced Date Production Div. OF OIL, GAS & MINING Production Div. OF OIL, GAS Water BBL Ratio Production Div. OF OIL, GAS Water BBL OIL Gravity Gas Gravity Production Method Gravity Production Div. OF OIL GAS Water BBL Ratio Water Gas:Oil Ratio Production Well Status													<u> </u>	ED (7 2011
Produced O7/25/2011 Date O7/28/2011 24 Production 46.0 1481.0 128.0 Corr. API Gravity DIW. OF OIL, GAS & MINING FLOWS FROM WELL Choke Size Flwg. 124 Press. 222.0 46 1481 128 PGW 28a. Production - Interval B Date First Produced Date Frest Date Flows From Well Status PGW Choke Tbg. Press. 222.0 61 A6 1481 128 PGW Choke Tbg. Press. 222.0 61 A6 1481 128 PGW Choke Tbg. Press. Csg. 24 Hr. Production BBL MCF BBL Corr. API Gravity Gas Gravity Production Method Gravity Production Producti													C	7 Came 8	
Choke Tbg. Press. Size Flwg. 124 Press. Rate BBL MCF BBL Ratio PGW 28a. Production - Interval B Date First Test Date Trested Production BBL MCF BBL MCF BBL Corr. API Gravity Choke Tbg. Press. Csg. Press. Rate BBL MCF BBL Ratio Choke Tbg. Press. Rate BBL MCF BBL Ratio Choke Ratio Well Status	Produced	Date	Tested		BBL	MCF	BBL	Corr			y	Product	DIV. OF	OIL,	GAS & MINING
26/64 SI 222.0 46 1481 128 PGW 28a. Production - Interval B Date First Produced Date Fested Production BBL MCF BBL Corr. API Gravity Gravity Gravity Gravity Gravity Production Method Gravity Gravi	Choke	Tbg. Press.	Csg.		Oil	Gas	Water	Gas:		Well S	tatus	L	1 201		ATT To Chapter the Control of the Co
Date First Test Hours Tested Production BBL MCF BBL Corr. API Gas Gravity Choke Tbg. Press. Csg. Press. Rate BBL MCF BBL Ratio Test Oil Gravity Gas Gravity Gas Gravity Gas Gas Corr. API Well Status				Kate	1			i '	•	F	PGW				
Produced Date Tested Production BBL MCF BBL Corr. API Gravity Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water Gas:Oil Ratio Well Status Flwg. Press. Rate BBL MCF BBL Ratio	28a. Produc	tion - Interva	l B												
Size Flwg. Press. Rate BBL MCF BBL Ratio	Date First Produced										y	Product	on Method		
	Choke Size	Flwg.								Well S	tatus				

20h Brod	uction - Inter	aral C									
Date First	Test	Hours	Test	Oil	Gas	Water	Oil Gravity	I _C	_	D. 4. 4 X. 4 5	
Produced	Date	Tested	Production	BBL	MCF		Corr. API	Ga	s avity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF		Gas:Oil Ratio	We	eli Status		
28c. Prod	uction - Inter	val D	- I 	<u> </u>					* * * * * * * * * * * * * * * * * * * *		
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF		Oil Gravity Corr. API	Ga Gr	s avity	Production Method	
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF		Gas:Oil Ratio	We	ell Status		
29. Dispo	sition of Gas	(Sold, used	l for fuel, veni	ted, etc.)	1						
		s Zones (II	nclude Aquife	ers):					31 For	mation (Log) Markers	
Show tests, i	all important	t zones of r	orosity and c	ontents ther	eof: Corecte tool ope	d intervals and all en, flowing and sh	drill-stem ut-in press	ures		(SOS) HAMAON	
	Formation		Тор	Bottom		Descriptions,	Contents,	etc.		Name	Top Meas. Depth
GREEN R BIRD'S NI MAHOGA WASATCI MESAVER	EST .NY H		1759 2097 2600 5252 8000	1012	5						
				:							
32. Additi Attack	ional remarks	s (include p	olugging proc	L edure): id the Was	atch perf	oration report.		· · · · · · · · · · · · · · · · · · ·			
22 Ci1-	enclosed atta										
			s (1 full set re	og'd)		2. Geologic Re	mort		2 DOT D	and 4 D's	inal Comme
		•	g and cement		:	6. Core Analys	-		3. DST Rep 7 Other:	oort 4. Direct	ional Survey
34. I herel	by certify tha	t the forego	Electi	ronic Subm	ission #1	omplete and correct 16682 Verified by EE OIL & GAS (y the BLM	Well Info	rmation Sys	records (see attached instruc	etions):
Name	(please print) ANDRE				······································			TORY AN	ALYST	
Signat	ture	(Electror	nic Submissi	on)			Date	• <u>09/01/20</u>	11		
_									· · · · · · · · · · · · · · · · · · ·		
Title 18 U	I.S.C. Section	n 1001 and v false, fic	Title 43 U.S.	C. Section 1	212, mak	e it a crime for an	y person ki	nowingly ar	nd willfully	to make to any department o	r agency

Operation Summary Report

Well: NBU 922-18D3BS - RED ***	Spud Conductor: 5/29/2009	Spud Date: 5/30/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD	Rig Name No: ROYAL WELL SERVICE 1/1
Event: RECOMPL/RESEREVEADD	Start Date: 7/12/2011	End Date: 7/22/2011

Active Datum: RKB @4,920.00ft (above Mean Sea	UWI: 0/9/S/22/E/18/0/S

Event: RECOM	APL/RES	SEREVEAL	DD	Start Da	te: 7/12/	2011		End Date: 7/22/2011
Active Datum: Level)	RKB @	4,920.00ft (above Mean	Sea	UWI: 0	/9/S/22/E	/18/0/S	WNW/6/PM/N/1,881.00/W/0/370.00/0/0
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
7/12/2011		- 7:00	0.25	COMP	48		P	HSM & JSA W/ROYAL WELL SERVICE
	7:00	- 18:00	11.00 ,	COMP	31	i	Р	RDMO NBU 921-35'O' PAD. ROAD RIG TO NBU 922-18E PAD. MIRU RIG, SPOT EQUIIP. WHP = 600 PSI TBG & 600 PSI CSG. PMP 15 BBLS DWN TBG TO CONTROL WELL. NDWH, NU BOP. PMP 25 BBLS DWN CSG TO KILL WELL. LD TBG HNGR. (PULLED 70,000/F TDD NSEAT HNGR). PULLING
7/13/2011	6:45	- 7:00	0.25	COMP	48		P	70,000# TO MOVE TBG. LD 2 JTS - (LIGHT SCALE ON INSIDE OF TBG, CLEAN ON OUT SIDE). CONT. TO POOH W/TBG & STD BK 44 STDS IN DRK, (2900') - NO SCALE. TBG CLEAN IN & OUT. CONT. TO POOH & LD TBG ON RACKS. RIH W/TBG IN DRK & COME OUT LAYING DWN. (289 JTS PULLED - 5 BAD, GAULDED THRDS) - RD TBG EQUIP, TBG SLIDE & RACKS. SWI - SDFN. PMP'D 75 BBLS TO CONTROL WELL. HSM & JSA W/ROYAL WELL SERVICE
	7:00	- 10:00	3.00	COMP	31	I	P.	WHP = 700 PSI CSG. BLOW WELL DWN TO FLOWBACK TANK. PMP 20 BBLS DWN CSG TO KILL WELL. MIRU CUTTERS WIRELINE. PU & RIH 4.5 10K CBP & SET @ 7970'. POOH & LD WIRELINE TOOLS. RDMO CUTTERS. ND BOP, NU F.V. LOAD CSG W/TMAC. RDMO WELL.
7/15/2011		- 7:00	0.25	COMP	48		P	HSM. HIGH PSI LINES.
	7:00	- 7:00	0.00	COMP	33	С	P	FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 43 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 31 PSI. 1ST PSI TEST T/ 6200 PSI. HELD FOR 30 MIN LOST 50 PSI. GOOD TEST. BLEED OFF PSI. MOVE T/ NEXT WELL.
7/18/2011	6:45	- 7:00	0.25	COMP	48	-	P	MIRU CUTTERS WL. PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER STG 1 PERF DESIGN. POOH. SWIFWE. HSM. HIGH PSI LINES. WIRE LINE AWAIRNESS.

Well: NBU 922	2-18D3BS - RED ***		Spud Co	onductor	: 5/29/20	009	Spud Date: 5/30/2009
Project: UTAH	I-UINTAH		Site: NB	U 922-1	8E PAD		Rig Name No: ROYAL WELL SERVICE 1/1
Event: RECON	MPL/RESEREVEAD	D	Start Da	te: 7/12/	2011		End Date: 7/22/2011
Active Datum: Level)	RKB @4,920.00ft (a	ibove Mean	Sea	UWI: 0	/9/S/22/F	E/18/0/SV	WNW/6/PM/N/1,881.00/W/0/370.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
	7:00 - 18:00	11.00	COMP	36	В	P	FRAC STG 1)DOWN FOR 6HR 30 MIN. MAKE REPAIR T/ BLENDER DECK MOTOR. SHUT DOWN IN PRE PAD BECAUSE CHEMYS WOULD NOT CHART. WHP 385 PSI, BRK 2368 PSI @ 3.1 BPM. ISIP 1191 PSI, FG .59. PUMP 100 BBLS @ 47.1 BPM @ 4487 PSI = 75% HOLES OPEN. ISIP 2789 PSI, FG .79, NPI 1598 PSI. MP 5738 PSI, MR 49.3 BPM, AP 5378 PSI, AR 48.6 BPM, PMP 1987 BBLS SW & 53,362 LBS OF 30/50 SND. NO RESIN N THS STG. TOTAL PROP 53,362 LBS. SWI, X-OVER FOR WL. PERF STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7469' P/U PERF AS PER STG 2 PERF DESIGN. POOH. FRAC STG 2)WHP 1480 PSI, BRK 2043 PSI @ 4.8 BPM. ISIP 1683 PSI, FG .67. PUMP 100 BBLS @ 46.9 BPM @ 4424 PSI = 85% HOLES OPEN. ISIP 2010 PSI, FG .71, NPI 327 PSI. MP 5469 PSI, MR 50.7 BPM, AP 4950 PSI, AR 50.1 BPM, PMP 692 BBLS SW & 16,706 LBS OF 30/50 SND.NO RESIN AS PER DESIGN. TOTAL PROP 16,706 LBS. SWI, X-OVER FOR WL. PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7153' P/U PERF AS PER STG 3 PERF DESIGN. POOH.SWI
7/19/2011	6:45 - 7:00	0.25	COMP	48		P	COMPUTER IN FRAC VAN QUIT WORKING HSM. H2S AND WEATHER.

Operation Summary Report

Nell: NBU 922	2-18D3BS - RED ***		Spud C	onductor: 5/29/20	09 Spud Da	ate: 5/30/2009
Project: UTAH	I-UINTAH		Site: NE	BU 922-18E PAD		Rig Name No: ROYAL WELL SERVICE 1/1
Event: RECON	MPL/RESEREVEAD	D	Start Da	ite: 7/12/2011		End Date: 7/22/2011
Active Datum: .evel)	RKB @4,920.00ft (a	above Mea	n Sea	UWI: 0/9/S/22/E	E/18/0/SWNW/6/PM	M/N/1,881.00/W/0/370.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code Sub Code	P/U MD Fro	
	7:00 - 7:00	0.00	COMP			FRAC STG 3)WHP 760 PSI, BRK 3403 PSI @ 4.6 BPM. ISIP 1629 PSI, FG .67. PUMP 100 BBLS @ 50 BPM @ 4596 PSI = 86% HOLES OPEN. ISIP 1716 PSI, FG .69, NPI 131 PSI. MP 5418 PSI, MR 50.2 BPM, AP 4628 PSI, AR 49.3 BPM, PMP 693 BBLS SW & 17,362 LBS OF 30/50 SND. TOTAL PROP 17,362 LBS. SWI, X-OVER FOR WL
						PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 6690' P/U PERF AS PER STG 4 PERF DESIGN.
						FRAC STG 4)WHP 220 PSI, BRK 2768 PSI @ 4.8 BPM. ISIP 1343 PSI, FG .64. PUMP 100 BBLS @ 37 BPM @ 4097 PSI = 62% HOLES OPEN. ISIP 1155 PSI, FG .61, NPI -191 PSI. MP 5599 PSI, MR 50.8 BPM, AP 4353 PSI, AR 50.3 BPM, PMP 867 BBLS SW & 23,047 LBS OF 30/50 SND. TOTAL PROP 23,047 LBS. SWI, X-OVER FOR WL.
						PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6275' P/U PERF AS PER STG 5 PERF DESIGN. POOH.
						FRAC STG 5)WHP 122 PSI, BRK 2004 PSI @ 4.4 BPM. ISIP 975 PSI, FG .60. PUMP 100 BBLS @ 41.7 BPM @ 5116 PSI = 60% HOLES OPEN. ISIP 1351 PSI, FG .66, NPI 376 PSI. MP 5579 PSI, MR 50.6 BPM, AP 5038 PSI, AR 50.3 BPM, PMP 740 BBLS SW & 23,086 LBS OF 30/50 SND. TOTAL PROP 23,086 LBS. SWI, X-OVER FOR WL
						PU 4 1/2 8K HAL CBP. RIH SET CBP @ 5952'. POOH. DONE FRACING THIS WELL.
7/21/2011	12:00 - 12:15	0.25	СОМР	48	Р	TOTAL SAND = 133,563 LBS TOTAL CLFL = 4903 BBLS TOTAL SCALE = 563 GAL TOTAL BIO = 109 GAL HSM & JSA W/ROYAL WELL SERVICE.
	12:15 - 18:00	5.75	COMP	31 I	P	MIRU RIG. SPOT EQUIP. WHP = 0 PSI. NDWH, NU BOP. RU TBG EQUIP & MOVE IN TBG RACKS TRANSFER TBG TO RACKS. PREP & TALLY TBG PU 3 7/8" MILL & SLIDING SLEEVE ASSEMBLY. RIH ON 187 JTS USED 2 3/8" 4.7# L80 TBG. TAC FILL @ 5947'. LD 2 JTS. RD TBG EQUIP. RU PW SWYL & PMP. EST CIRC. PT CSG & BOP'S TO 3000 PSI & HOLD 15 MIN. (LOST 100#). BLEED OFF WELL. SWI-SDFN. PREP TO D/O 5 CBP'S II AM.
7/22/2011	6:45 - 7:00	0.25	COMP	48	P	AM. HSM & JSA W/ROYAL WELL SERVICE

Operation Summary Report

Well: NBU 92	2-18D3BS - RED *		Spud C	Unductor	. 3/23/20	309	Spud Date. 5	0/2009			
Project: UTAH	I-UINTAH		Site: NB	U 922-1	8E PAD			Rig Name No: ROYAL WELL SERVICE 1/1			
Event: RECO	MPL/RESEREVE	NDD	Start Da	te: 7/12/	2011		• • • • • • • • • • • • • • • • • • • •	End Date: 7/22/2011			
Active Datum: Level)	RKB @4,920.00ft	(above Mean	Sea	UWI: 0	/9/8/22/	E/18/0/S	WNW/6/PM/N/1	,881.00/W/0/370.00/0/0			
Date	Time	Duration	Phase	Code	Sub	P/U	MD From	Operation			
	7:00 - 18:00	(hr) 11.00	COMP	44	Code C	P	(ft)				
	10.00	11.00	COMI	77	Ü	ľ		WHP = 0 PSI. RIH TAG FILL @ 5947'. C/O 5' OF SND. CBP #1) DRLG OUT HALCO 8K CBP @ 5952' IN 5 MIN. 200 DIFF PSI. RIH TAG FILL @ 6252'. C/O 23 OF SND. FCP = 50 PSI. CBP #2) DRLG OUT HALCO 8K CBP @ 6275' IN 8			
								MIN. 100 DIFF PSI. RIH TAG FILL @ 6624'. C/O 46 OF SND. FCP = 200 PSI.			
								CBP #3) DRLG OUT HALCO 8K CBP @ 6670' IN 5 MIN. 0 DIFF PSI. RIH TAG FILL @ 7121. C/O 27 OF SND. FCP = 200 PSI.			
								CBP #4) DRLG OUT HALCO 8K CBP @ 7148' IN 7 MIN. 0 DIFF PSI. RIH TAG FILL @ 7455'. C/O 14 OF SND. FCP = 175 PSI.			
								CBP #5) DRLG OUT HALCO 8K CBP @ 7469' IN 6 MIN. 0 DIFF PSI. RIH & TAG FILL @ 7932'. C/O TO 7959'. (27' SAND) PBTD @ 7970. FCP = 100 PSI. CIRC WELL CLEAN.			
								ND PWR SWVL, NU TBG EQUIP. LD 16 JTS ON RACKS, (86 TOTAL ON RACKS). LND TBG ON HNGR W/235 JTS NEW 2 3/8" 4.7# L80 TBG @ 7488.19'. RD FLOOR & TBG EQUIP. ND BOP, NUWH. MIRU DELSOC. RIH & PULL TBG FLOAT. (COULD NOT GET PAST 3060'). POOH W/SLICKLINE. FLUSH TBG W/23 BBLS TMAC. RU SLICKLINE, RIH W/RETRIEVING HEAD, COULD NOT LATCH IN. POOH & CHECK HEAD. MAKE 2nd ATTEMPT TO RETRIEVE FLOAT, COULD NOT LATCH IN. POOH, RDMO DELSCO. MIRU CUTTERS WIRELINE. PU 1 9/16 TBG PUNCH GNS, 4 SPF, 0.36 HOLES. RIH & PERF TBG FROM 7466' - 72', 24 HOLES. POOH & LD TOOLS. SWI - RDMO CUTTERS WIRELINE. TURN WELL TO F.B.C. SICP = 00 PSI, SITP = 00 PSI.			
								NOTE (LOST RETURNS BETWEEN PLUGS 2 & 3, ALSO BETWEEN PLUGS 4 & 5.)			
								KB 26' HANGER 0.83' XN NIPPLE 1.1' TBG 235 JTS = 7459.65' PROD SLEEVE @ 7486.66' EOT @ 7488.19' (86 JTS RTND)			
7/23/2011	7:00 -			33	A			TWTR = 4,703 BBLS TWR = 570 BBLS TWLTR = 4133 SICP = 50 PSI, SITP = 50 PSI. 7 AM FLBK REPORT: CP 1250#, TP 50#, OPEN /64" CK, 15 BWPH, TRACE SAND, - GAS			
7/24/2011	7:00 -			33	A			TTL BBLS RECOVERED: 860 BBLS LEFT TO RECOVER: 3843 7 AM FLBK REPORT: CP 1600#, TP OPEN#, -/64" CK, NA BWPH, NA SAND, NA GAS			
								TTL BBLS RECOVERED: 1040 BBLS LEFT TO RECOVER: 3663			

Well: NBU 922	2-18D3BS - RED ***		Spud C	onductor	: 5/29/20	Spud Date: 5/30/2009				
Project: UTAH	I-UINTAH		Site: NE	BU 922-1	8E PAD	Rig Name No: ROYAL WELL SERVICE 1/1				
Event: RECO	MPL/RESEREVEAD	D	Start Da	ate: 7/12/	2011	End Date: 7/22/2011				
Active Datum: Level)	RKB @4,920.00ft (a	bove Mean	Sea	UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/370.00/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U MD From Operation (ft)				
7/25/2011	7:00 -			33	A	7 AM FLBK REPORT: CP 2250#, TP 0#, OPEN/64" CK, 0 BWPH, - SAND, - GAS TTL BBLS RECOVERED: 1045 BBLS LEFT TO RECOVER: 3658				
	11:15 - 11:15	0.00	PROD	50		WELL TURNED TO SALES @ 1115 HR ON 7/25/2011 - 1044 MCFD, 118 BWPD, CP 2000#, FTF 350#, CK 20/64"				
7/26/2011	7:00 -			33	Α	7 AM FLBK REPORT: CP 1450#, TP 700#, 26/64" CK, 20 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 1449 BBLS LEFT TO RECOVER: 3254				
7/27/2011	7:00 -			33	Α	7 AM FLBK REPORT: CP 1000#, TP 600#, 26/64" CK, 8 BWPH, TRACE SAND, - GAS TTL BBLS RECOVERED: 1661 BBLS LEFT TO RECOVER: 3042				
7/28/2011	7:00 -			33	Α	7 AM FLBK REPORT: CP 950#, TP 550#, 26/64" CK 5 BWPH, trace SAND, - GAS TTL BBLS RECOVERED: 1781 BBLS LEFT TO RECOVER: 2922				
7/29/2011	7:00 -			33	Α	7 AM FLBK REPORT: CP 950#, TP 550#, 26/64" CK 5 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 1901 BBLS LEFT TO RECOVER: 2802				

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 922-18D3BS - RED ***		
Common Name	NBU 922-18D3BS		
Well Name	NBU 922-18D3BS	Wellbore No.	ОН
Report No.	1	Report Date	7/12/2011
Project	UTAH-UINTAH	Site	NBU 922-18E PAD
Rig Name/No.	ROYAL WELL SERVICE 1/1	Event	RECOMPL/RESEREVEADD
Start Date	7/12/2011	End Date	7/22/2011
Spud Date	5/30/2009	Active Datum	RKB @4,920.00ft (above Mean Sea Level)
UWI	0/9/S/22/E/18/0/SWNW/6/PM/N/1,881.00/W/0/3	370.00/0/0	

1.3 General

Contractor	CASEDHOLE SOLUTIONS	Job Method	PERFORATE	Supervisor	KENNY WARREN
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density	Gross Interval	6,002.0 (ft)-7,929.0 (ft)	Start Date/Time	7/18/2011	12:00AM
Surface Press		Estimate Res Press	No. of Intervals	12	End Date/Time	7/18/2011	12:00AM
TVD Fluid Top	·	Fluid Head	Total Shots	120	Net Perforation Interval		31.00 (ft)
Hydrostatic Press		Press Difference	Avg Shot Density	3.87 (shot/ft)	Final Surface Pressure		
Balance Cond	NEUTRAL				Final Press Date		

2 Intervals

2.1 Perforated Interval

Date Formation/	CCL@	CCL-T	MD Top	MD Base	Shot	Misfires/	Diamete	Carr Type /Carr Manuf	Carr	Phasing	Charge Desc /Charge	Charge	Reason	Misrun
Reservoir	(ft)	S (ft)	(ft)		Density (shot/ft)	Add. Shot			Size	(°)	Manufacturer	Weight		
12:00AMWASATCH/	<u>1 (-) </u>	<u> (io)</u>	6,002.0		4.00	ing A. A. Palas A.A.	(in) 0.360	EXP/	(in) 3.375	90.00		(gram) 23.00	PRODUCTIO	
	E S	1		į									N	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (ft)	CCL-T S (ft)	MD Top (ft)			Misfires/ Add. Shot		Carr Type /Carr Manuf	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
12:00AM	WASATCH/			6,242.0				0.360	EXP/	3.375	90.00			PRODUCTIO N	200
12:00AM	WASATCH/			6,442.0	6,444.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM	WASATCH/			6,484.0	6,486.0	3.00	e legen our ex region	0.360	EXP/	3.375	120.00		23.00	PRODUCTIO N	
12:00AM\	WASATCH/			6,540.0	6,541.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM\	WASATCH/		1	6,652.0	6,653.0	4.00	e de la compania	0.360	EXP/	3.375	90.00	par en Mental Mental Central C	23.00	PRODUCTIO N	
12:00AM\	WASATCH/			6,659.0	6,660.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM\	WASATCH/			7,117.0	7,123.0	4.00		0.360	EXP/	3.375	90.00	10.000 000 000 000 000 000	23.00	PRODUCTIO N	
12:00AM\	WASATCH/		*	7,424.0	7,427.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM\	WASATCH/			7,436.0	7,439.0	4.00	e se consideration de la c	0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
12:00AM\	WASATCH/	and the second	***	7,778.0	7,781.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
12:00AM	WASATCH/	Approximation and the second		7,926.0	7,929.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic